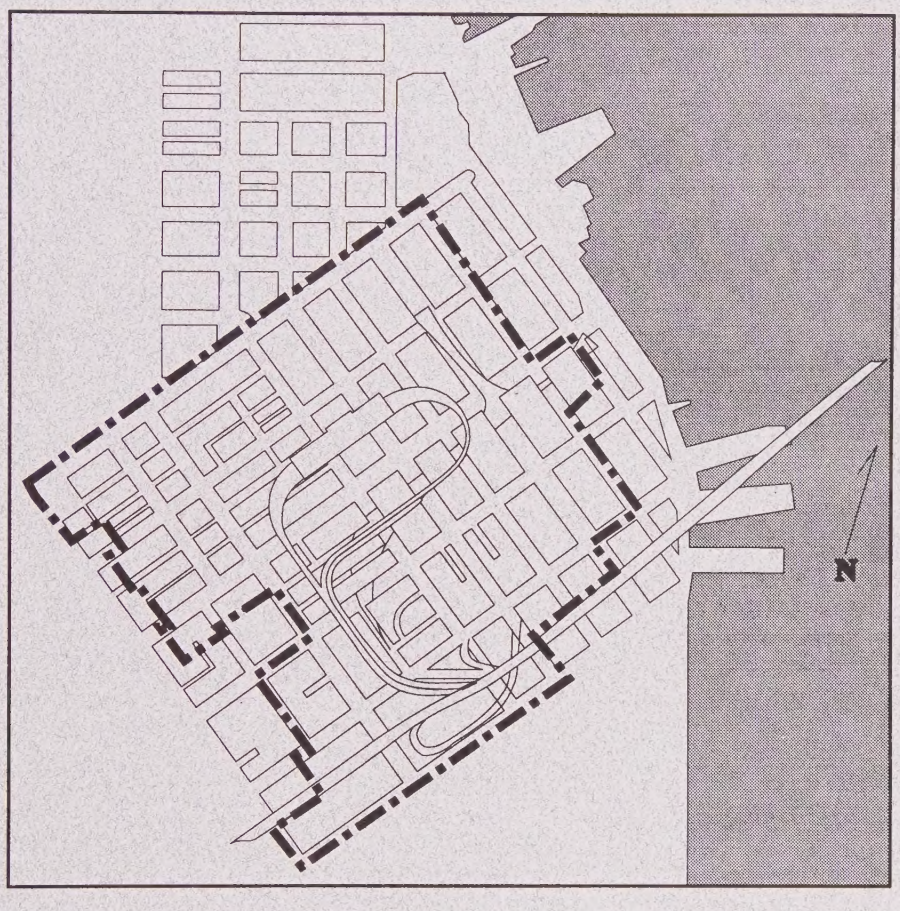
TRANSBAY AREA PLAN

Background Data Report



The Planning Department
City and County of San Francisco

February 27, 1995

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BACKGROUND DATA REPORT

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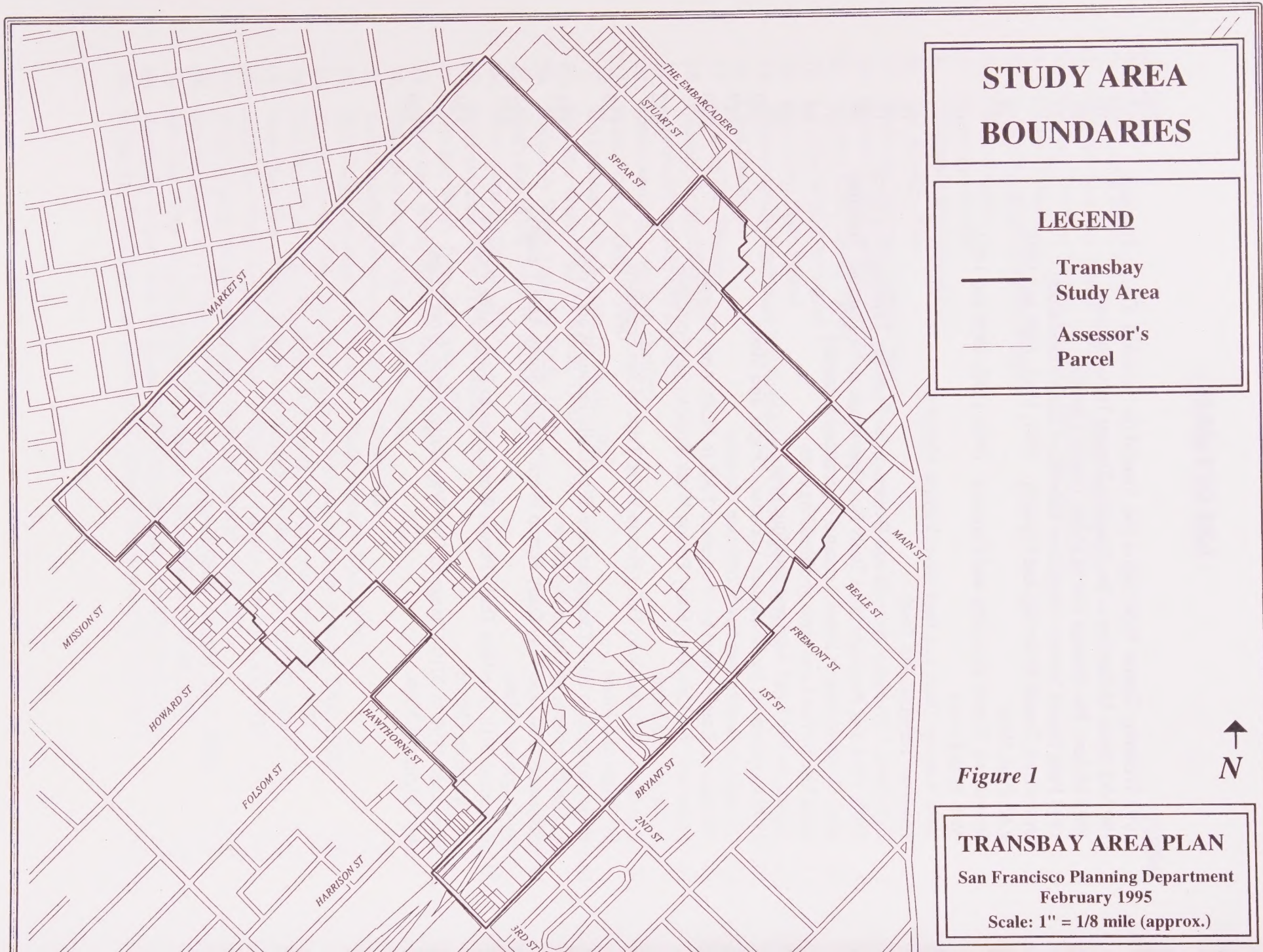

STUDY AREA BOUNDARIES

LEGEND

Transbay Study Area

Assessor's Parcel

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Figure 1

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995
Scale: 1" = 1/8 mile (approx.)

EXECUTIVE SUMMARY

Introduction

The purpose of this background data report is to provide the basis for evaluating the two alternative sites for a Transbay Transit Terminal in downtown San Francisco: the site of the existing Transbay Terminal between First and Fremont Streets at Mission Street, and a site in the vicinity of Main, Mission, Beale and Howard Streets. The objectives of the Transbay Area Plan are to draft a transportation and land use plan and implementation program that will:

1. Maintain and enhance transit activities in the area;
2. Support a transportation system to meet local and regional needs into the 21st Century;
3. Guide the development of land in conjunction with local and regional transportation needs as identified in Objectives 1 and 2 above.

The study has been structured in four phases. The first, **Pre-Commencement Study Organization and Funding**, involved reaching an agreement on the study work scope and funding, and establishing the Policy Advisory Committee, the Technical Advisory Committee and the Citizens Advisory Committee. This has been completed. The second phase, **Study Commencement**, includes developing goals and objectives (completed), and organizing existing data (through this report). It also includes developing the Transbay Transit Terminal site and Main/Mission/Beale/Howard terminal options, which is currently underway. The third phase, **Prepare Plan Alternatives and Implementation Strategy**, will include reviewing and refining the transportation alternative and developing the land use alternatives. From these alternatives, a preferred option will be chosen for final refinement and for formulating an implementation strategy with a specific action plan. The fourth phase, **Develop Consensus**, will include documenting the study findings, conducting informational hearings in various public and private forums and developing a Request for Proposals for the Transbay Transit Terminal.

The eighteen-month study process is planned to result in the selection of a preferred alternative in mid-Summer 1995, and perhaps a request for proposal issued by Caltrans in Spring 1996 to rebuild or construct the Transbay Transit Terminal.

Background

Following the October 1989 Loma Prieta earthquake, the Office of the State Architect (now the Division of the State Architect) released a study in 1992 concluding that the TTT building needed substantial upgrades to meet current seismic and other fire/life/safety codes. The study estimated the cost for the basic upgrades at about $34 million, and did not address the long-term transit needs and goals of the Terminal.

In December of 1992, in a letter to James van Loben Sels, the Director of Caltrans, San Francisco Mayor Frank Jordan asked Caltrans to consider the removal of the Transbay Terminal and replacement with a smaller facility that would be a more appropriately designed building to serve the functions of the Terminal. Soon thereafter, in a series of resolutions adopted in 1993, a number of East Bay cities called for the retention of the Transbay Terminal as the region's primary public transit bus hub.

In early 1993 Caltrans drafted a Request For Proposal (RFP) in which the City of San Francisco was requested to jointly participate in soliciting interest in a joint real estate development of the property site of the Terminal. On March 22, 1993, the San Francisco Board of Supervisors (Board), at the request of the Mayor, unanimously passed a resolution requesting that Caltrans work with the City to study alternatives to rehabilitation of the Terminal and reconstruction of the nearby Terminal Separator Structure.

In early September 1993, in anticipation of the release of the Transit Needs Study, the Mayor requested the Planning Department to undertake a quick study to assist in determining the siting and configuration of a transit terminal best able to meet the transit needs of the City and region into the future. This report showed that a terminal at Main, Mission, Beale and Howard may be feasible, but it would have to be significantly different from the design investigated in the study. Its findings for the existing Terminal site are less relevant to the Transbay Area Plan.

In 1993, the Metropolitan Transportation Commission (MTC) and the Peninsula Joint Powers Board (JPB) conducted a study to identify fundable alternatives for the CalTrain Downtown Extension that could be included in the *1994 Regional Transportation Plan (RTP).* As a result of this study, in March 1994, the JPB selected Alternative 8B (Beale and Market, electrified) as the Locally Preferred Alternative (LPA), to be advanced into preliminary engineering/environmental analysis and included in the 1994 RTP. In addition, the JPB directed that preliminary environmental analysis be conducted for Alternative 3B (Transbay Terminal).

Since different alternatives are being considered, Caltrans and the City decided to fund the Transbay Area Plan and Implementation Program, a more detailed analysis of the Main/Mission/Beale/Howard site and a new and/or renovated terminal building on the existing site.

Existing Transbay Terminal Operations

In 1993, 12 local, regional, intercity and tour bus operators used the Terminal building. According to the staff working paper of the Transit Needs Study, in 1992 more than 31,000 passengers used the Terminal and adjacent street bus stops daily. Seven of the twelve bus operators used the interior bus deck located at the upper level bus platform of the building for loading and unloading purposes. The two outside areas to the north of the Terminal, one at the mezzanine level known as the "hump" and one at the street level known as the "crescent", are on Caltrans property and are heavily used by Muni and SamTrans, respectively.

Overall, in 1992 there were about 660 bus arrivals and departures during the morning peak period (6:30 a.m. to 9:00 a.m.) in the Transbay Terminal area, including the private bus carriers. During the afternoon peak period (4:00 to 6:30 p.m.) there were about 740 bus arrivals and departures in the Terminal area, including the private bus carriers.

Traffic Conditions

As a result of earthquake damage to the elevated freeway structures in the downtown area and subsequent removal of the Embarcadero Freeway and the Terminal Separator Structure, traffic patterns have changed considerably in the study area. Post-earthquake freeway access to the East Bay and the Peninsula is only provided through the ramps in the South of Market area. As a result, traffic volumes on surface streets have increased in the South of Market area, particularly in the vicinity of the Transbay Terminal.

Transit Terminal Use Projections

A staff working paper of the Transit Needs Study, dated October 1993, was prepared by the Metropolitan Transportation Commission (MTC) and Caltrans to identify existing uses and deficiencies, as well as future needs of the Transbay Transit Terminal (TTT). In general, the Transit Needs Study projected that bus service to the Terminal would increase by 2013, and the number of passengers using the Terminal facility would almost double over the same period. The largest increase in service was assumed for AC Transit and Greyhound. Based on projections in the Transit Needs Study, AC Transit would require forty bus berths on the third floor deck. Overall for the Terminal site and adjacent streets, the need for additional bus berths would increase from the existing 61 to 82 passenger boarding areas.

Steuart Street Muni Terminal

Eleven Municipal Railway bus lines serving the Market and Mission Street corridors use the Bus Terminal Facility at Mission and Steuart Streets, carrying over 128,000 daily riders. The replacement of the 8-Market trolley coach with the F-Market streetcar, and in one potential scenario, the consolidation of the 7-Haight with the 71-Noriega (trolley coach) will effectively reduce the number of bus lines using the Steuart Street terminal to nine. However, an extension of the 3 and 26 lines and the F-Line loop tracks providing a direct connection to the terminal addition would increase the number to twelve.

Land Use

The Transbay Transit Terminal (TTT) and its bus access ramps occupy a central location within downtown San Francisco. The financial district extends to the north and east, with the waterfront beyond. Moscone Center, and Yerba Buena Center, are immediately adjacent west of the study area, and the region's premier retail district, Union Square, is to the northwest. The changing South of Market, Rincon Hill/South Beach, and Mission Bay districts are to the south.

The Terminal area is a central node that demarcates a transitional zone between the high density office area and the districts to the south which are more industrial and mixed in character.

The demolition of the Terminal Separator Structure and the removal of the Embarcadero Freeway have provided additional vacant land with great potential for accommodating transportation functions and development around the Transbay Transit Terminal. The Transbay Transit Terminal is located between Mission, First, Natoma, and Fremont Streets with ramps that sweep east and westward from the Terminal itself to form a loop connecting to the Bay Bridge and city streets. The area immediately adjacent to and south of the Transbay Transit Terminal is characterized by mixed use lower buildings and surface parking lots. Office buildings with ground floor retail predominate along major streets, such as Mission, Howard, and Second Streets while industrial uses tend to front along the alley streets such as Natoma, Tehama, and Clementina Streets. Parcels north of Folsom Street and east of Essex Street were vacated with the removal of the Terminal Separator Structure. The blocks between Main, Beale, Folsom, and Mission Streets were vacated by the demolition of the Terminal Separator Structure with the exception of the building at 301 Mission Street, and some buildings on Folsom Street.

Existing and Projected Employment

Current employment data included in this report comes from the 1990 Census, Journey-to-Work file. This file details employees by location of employment, residence, and means of travel to work. Geographically, this data is based on census travel analysis zones (CTAZs) which closely correspond to census block groups. The major findings from this analysis were that the largest group of San Francisco employees also live in San Francisco, and that this group has the highest transit mode share. Overall (but not downtown), autos dominated as the means of travel to work in San Francisco, 55 percent to 45 percent for transit. Projected employment data included here is from the Association of Bay Area Government's (ABAG) Projections '94. The major findings from analysis of these projections were that a significant increase in employment, more than 50 percent, is expected in the area immediately south of Harrison Street, and north of Townsend street in the South of Market area (superdistrict 1 South) between 1990 and 2010. Most of this increase is expected to occur after the year 2000. Employment is also projected to increase significantly, by about one-third, in superdistrict 3, which covers the area east of Twin Peaks and south of Townsend street to the County line, by the year 2010.

Existing and Projected Travel

Data in this section were gathered from the Metropolitan Transportation Commission's (MTC) Daily Person Trip Projections and were analyzed for the years 1990 and 2010. Major findings from this analysis, for both 1990 and 2010 are that the majority of work trips to San Francisco originate from within San Francisco. The East Bay is the next largest contributor of work trips to San Francisco, both in 1990 and in 2010, and for transit and ride share, but not for auto. For work trips by auto to San Francisco, the South Bay is the largest contributor outside of San Francisco, both in 1990 and in 2010.

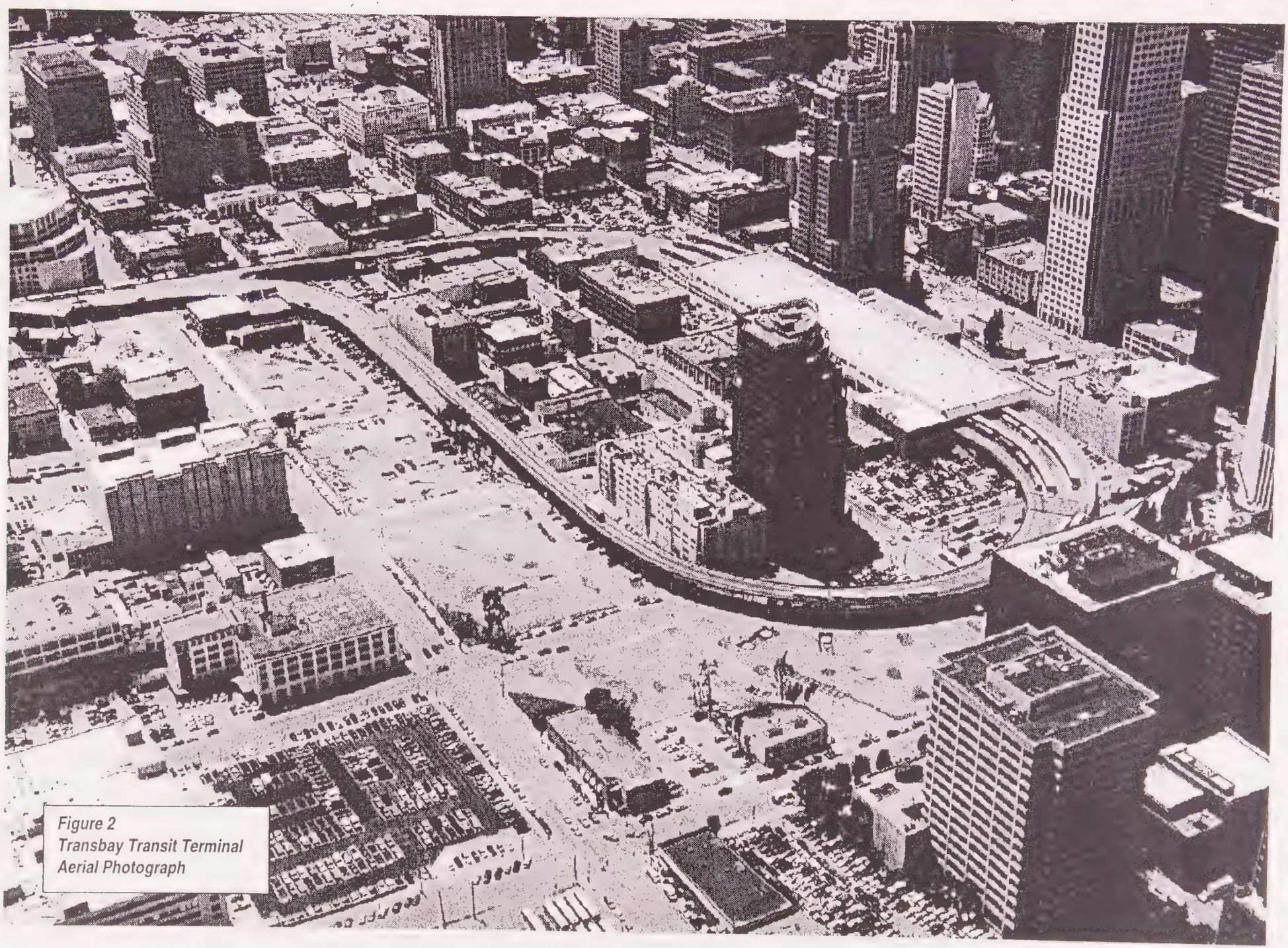


Figure 2
Transbay Transit Terminal
Aerial Photograph

BACKGROUND

The Transbay Transit Terminal (TTT) and its adjoining ramp system were completed in 1939 as part of the construction of the Bay Bridge (see Figure 2). It was designed to accommodate East Bay rail service provided by Southern Pacific's "Big Red Trains," Sacramento Northern trains, and the Key System. Southern Pacific and Sacramento Northern service into the Terminal was short-lived, and Key System service ended in the late 1950's. Bus service provided by AC Transit replaced rail service, and the Terminal was revamped to serve as a bus terminal. AC Transit and Greyhound now have the greatest use of the Terminal building. There are also ten other operators using the Terminal including Gray Line, Golden Gate Transit, Muni, and SamTrans.

Following the October 1989 Loma Prieta earthquake, the Office of the State Architect (OSA, now the Division of the State Architect) conducted studies for the California Department of Transportation (Caltrans), which owns and operates the facility, to evaluate the Transbay Transit Terminal. The OSA study released in 1992 concluded that the TTT building needed substantial upgrades to meet current seismic and other fire/life/safety codes. The 1992 estimated cost for the basic upgrades was about $34 million. This basic upgrade, however, would not address long-term transit needs and goals of the Terminal, as was emphasized in the OSA study:

> *The Office of the State Architect believes that the renovated project as proposed is an interim solution to the bus interface problems at the terminal. If funding were available, the best interest of the public would be served by the demolition of the existing facility and its replacement with a new terminal.*

In December of 1992, in a letter to James van Loben Sels, the Director of Caltrans, Mayor Frank Jordan asked Caltrans to consider the removal of the Transbay Terminal and replacement with a smaller facility that would be a more appropriately designed building to serve the functions of the Terminal. This request was made in light of the major capital cost faced by Caltrans to bring the building to seismic and other code compliance and Caltrans' interest in investigating joint development opportunities.

In a series of resolutions adopted in 1993, a number of East Bay cities called for the retention of the Transbay Terminal as the region's primary public transit bus hub (see appendix). These resolutions rely on MTC's Bay Crossing Study which concluded that the most cost efficient means to meet future transbay travel demand is through expanding existing transbay bus service.

In early 1993 Caltrans drafted a Request For Proposal (RFP) in which the City of San Francisco was requested to jointly participate in soliciting interest in a joint real estate development of the property site of the Terminal.

On March 22, 1993, the San Francisco Board of Supervisors (Board), at the request of the Mayor, unanimously passed a resolution requesting that Caltrans work with the City to study alternatives to rehabilitation of the Terminal and reconstruction of the nearby Terminal Separator Structure. The Terminal Separator provided an elevated connection between I-80 and the Embarcadero Freeway prior to being damaged by the earthquake. In response to the City's request, Caltrans agreed to postpone proceeding with additional improvements to the Terminal building for six months to explore joint development opportunities for a new replacement facility. Two studies were to be undertaken:

- a Transit Needs Study conducted by the Metropolitan Transportation Commission (MTC) and Caltrans to determine existing and future transit service needs for the Terminal; and
- a report analyzing alternatives to replacement of the Terminal Separator Structure prepared by the City.

Caltrans, MTC, the City, and transit operators started working on the Transit Needs Study of the Terminal in early 1993. The purpose of the study was to define the transit parameters to be incorporated with a mixed use development proposal for the Transbay Terminal. In addition to considering the existing transit uses, the potential for rail extension projects that are likely to have a terminus at the Transbay Terminal building were considered. The Transit Needs Study was released as a working paper in late October 1993.

Caltrans proceeded with the improvements of the Transbay Terminal building which includes temporary replacement of the roof and seismic bracing and shear walls.

The Board of Supervisors stated its intention to report back to Caltrans its position on both Transbay Transit Terminal and Terminal Separator Structure issues by September 1, 1993, pending the results of both studies. The Terminal Separator Structure report was completed by the Planning Department in July 1993, and the Board took action on this issue before the September deadline. The Board deferred action concerning the Transbay Transit Terminal because the Transit Needs Study was not yet completed by MTC and Caltrans.

In early September 1993, in anticipation of the release of the Transit Needs Study, the Mayor requested the Planning Department to undertake a quick study to assist in determining the siting and configuration of a transit terminal best able to meet the transit needs of the City and region into the future. This effort also responded to the request from Caltrans to the City to mutually pursue joint development opportunities.

The report examined three alternatives. Alternative A utilized the existing Transbay Transit Terminal site and adjacent properties to build a new underground and surface level transit terminal with opportunities for joint development of other land uses above the ground level. Alternative B proposed a new replacement transit terminal in the right-of-way formerly occupied by the Main and Beale freeway ramps for the Terminal Separator Structure north and south of Howard Street. Alternative X modified the existing Terminal building by adding a second bus deck to the building, but accommodated rail needs underground.

The study found that both Alternatives A and B would satisfy the principal requirements for a new transit terminal and create opportunities for development of other land uses in this central downtown location. Alternative X would satisfy the principal requirements for a new transit terminal, but created more limited opportunities for joint development.

Many of the circumstances assumed in the report have changed, particularly the definition of the CalTrain extension alternatives. This report showed that a terminal at Main/Mission/ Beale/Howard may be feasible, but it would have to be significantly different from the design investigated in the study. Its findings for the existing Terminal site are less relevant to the Transbay Area Plan. Caltrans and the City decided to fund the Transbay Area Plan and Implementation Program, a more detailed analysis of the Main/Mission/Beale/ Howard site and a new and/or renovated terminal building on the existing site.

I. TRANSPORTATION

A. TRANSBAY TRANSIT TERMINAL OPERATIONS

1. *Background*

The Transbay Transit Terminal in downtown San Francisco opened in 1939 as part of the San Francisco-Oakland Bay Bridge railway and is currently the busiest transit terminal on the West Coast. In 1939, East Bay rail service on the lower deck of the Bay Bridge was provided by Southern Pacific's "Big Red Trains," Sacramento Northern trains, and the Key System. The Southern Pacific and Sacramento Northern service into the Terminal was short-lived, and Key System service ended in the late 1950's. Bus service provided by AC Transit replaced rail service, and the Terminal was revamped to serve as a bus terminal in 1959. Currently, AC Transit and Greyhound now have the most extensive use of the Terminal building (see Figure 3).

The original structure was designed to provide a system of enclosed ramps and stairs with the shortest distance path from any of the adjacent streets to various trains, unlike a conventional train station. The original structure was designed in three units that connected on the upper floors. All units had a basement, first, mezzanine and track floor. Six tracks were constructed on the upper floor to allow a train 5 minute loading and unloading period. In the front of the building, the Mission Street ramp was designed to bring Muni's streetcars to the mezzanine.

Automobile and bus competition coupled with reduced bridge tolls caused the rail system on the bridge to go out of service and in 1958 the last train crossed the bridge. In 1956, AC Transit was formed to assume responsibilities for the Key system routes, and operation of bus service began in July of 1958. In 1957 legislation was passed to convert the lower deck of the Bay Bridge to mixed vehicular traffic, and the lower deck opened for unidirectional traffic in October of 1963.

2. *Existing Conditions*

The following information is provided based on the 1992-1993 operational data for the terminal. Most of this information remains relevant to the current use of the Terminal. In 1993, 12 local, regional, intercity and tour bus operators used the Terminal building. There are four public transit operators using the Terminal area. The other eight bus carriers are either private bus tour operators or other types of bus carriers. According to the staff working paper of the Transit Needs Study, in 1992 more than 31,000 passengers used the Terminal and adjacent street bus stops daily. The situation in 1994 was very similar.

Seven of the twelve bus operators use the interior bus deck located at the upper level bus platform of the building for loading and unloading purposes. Passengers wait for buses next to the bus bays on the third level. The two outside areas to the north of the Terminal, one at the mezzanine level known as the "hump" and one at the street level known as the "crescent", are on Caltrans property and are heavily used by Muni and SamTrans, respectively. Natoma Street is to

the south of the Terminal building and is used by some private buses and, until mid 1993, by Amtrak. The streets around the Terminal are used by various bus carriers who serve the Bay Area and beyond.

Table 1 (1992 Weekday Transit Ridership at and Around the Transbay Transit Terminal) shows the 1992 weekday transit ridership at and around the Transbay Transit Terminal. AC Transit with 653 bus arrivals and departures on weekdays was the largest transit carrier using the Terminal building. In 1994, AC Transit usage increased to 769 buses and 14,208 passenger arrivals and departures. Muni, with 1,003 buses on weekdays using the "hump" area outside the Terminal building, has the largest number of bus arrivals and departures. Since 1992, Falcon and Amtrak have left the Terminal, while Sierra Trailways and Peerless have begun service there. SFO Airporter is scheduled to move into the Terminal in 1995 and Golden Gate Transit will give up one stop for its use.

Currently AC Transit operates 40 express bus service lines from multiple locations in the East Bay into downtown San Francisco. The routes are: A, B, BX, C, CBX, CH, E, F, FS, G, H, KH, L, LA, LB, LC, LX, N, NV, NF, NG, NH, NZ, O, OX, OX1, RCV, S, S1, SW, T, T2, T3, U, V, W1, W2, Y, and Z lines and they all stop inside the terminal.

Muni operates four bus lines to the Transbay Terminal. The lines 5 Fulton, 6 Parnassus, 38 Geary and 38L Geary stop on the "hump" to the north of the Terminal building at the mezzanine level. The 14L Line terminates at the Terminal on Saturdays only. The historic streetcar F Line is scheduled to end at the Terminal in late 1995. Muni also has a number of other routes that operate in the vicinity of the Terminal along Mission, First and Fremont Streets. However, these routes do not terminate and/or begin at the Terminal.

SamTrans operates 8 bus lines from San Mateo County into the Terminal. All of the buses stop at the "crescent" area in front of the Terminal off Mission Street. SamTrans Bus lines are: 5M, 7B, 7F, 16F, 17F, 18 F, 19F, and 41 F.

Golden Gate Transit operates 22 bus lines from Marin and Sonoma County adjacent to and within the Transbay Terminal. Seven bus lines use the third level platform via Second Street ramps to access the Terminal: the 10, 20, 50, 60, 70, 80 and (part-time) 90 . Eight lines stop between Mission and Market Streets on First Street: the 18, 24, 26, 28. 32, 34, 38 and 44. Eight stop on First Street between Mission and Howard: the 30, 48, 54, 56, 72, 74, 76 and 78. In addition, the 2, 4 and 8 Golden Gate Transit bus lines operate within the vicinity of the Transbay Terminal.

The Terminal building structure, exclusive of the bus access ramps, occupies portions of the three city blocks between Second, Mission, Beale and Howard Streets. The main building known as the Transbay Transit Terminal is located on the central block between First, Mission, Fremont and Natoma Streets. The two buildings located to the east and west of the main building connect to the main building from the bus deck above. These two buildings are mainly

used for parking at the lower level. The bus deck occupies the entire third level of all three buildings.

The main Terminal building has three levels accessible to the public. The interior bus deck occupies the entire third level of the building. The mezzanine level of the Terminal is used for passenger waiting area, ticketing offices, restaurants, retail and other uses.

A large passenger waiting area is located at the ground level and space is shared with restaurants, ticketing offices and some other uses. Natoma Street is at the same level as this area and passengers leaving from Natoma Street or passengers arriving on Natoma Street use this area for waiting purposes.

Table 2 (1992-3 Space Utilization at the Transbay Transit Terminal Area) identifies specific uses and the square footage of all of the three Terminal buildings and the surrounding areas with bus related uses for 1992-1993. The largest single use in the three buildings was parking which occupied 156,000 square feet.

A set of exclusive ramps connect the Terminal building to the Bay Bridge. These ramps are used by AC Transit, Greyhound and other bus deck operators for access. An on/off exclusive transit and emergency service vehicle ramp provides access from the Terminal building to surface streets through the Bay Bridge ramp, at Second and Harrison streets. This ramp is mostly used by Greyhound and Golden Gate Transit buses.

The ramps leading to the Terminal are also used for bus storage purposes. Table 3 (1993 Midday Bus Storage Use of Major Transit Carriers) identifies ramp storage use by transit carriers in 1992. AC Transit stored a maximum of 80 buses and Gray Line stored 12 buses on a daily basis. The existing minimum radius on the bus ramps is 250 feet and 165 feet for the Second Street ramp. The maximum grade on the dedicated bus ramp is 4 percent, except at the Harrison Street ramp, which is steeper.

Peak hour operation information for 1993 for the largest transit carriers using the terminal building is provided in Table 4 (1993 Peak Period Service Levels and Ridership [Transit Operators]). This information supplemented by other carriers (add 7-8%) and the proposed SFO Airporter (add 6%) determines maximum demand requirements.

Table 4 indicates that greatest bus volume in the peak period for AC Transit, the largest user of the Terminal building, was 107 buses in the morning peak hour and 104 buses in the afternoon peak hour. Overall there were about 660 bus arrivals and departures during the morning peak period (6:30 a.m. to 9:00 a.m.) in the Transbay Terminal area, including the private bus carriers. During the afternoon peak period (4:00 to 6:30 p.m.) there were about 740 bus arrivals and departures in the Terminal area, including the private bus carriers.

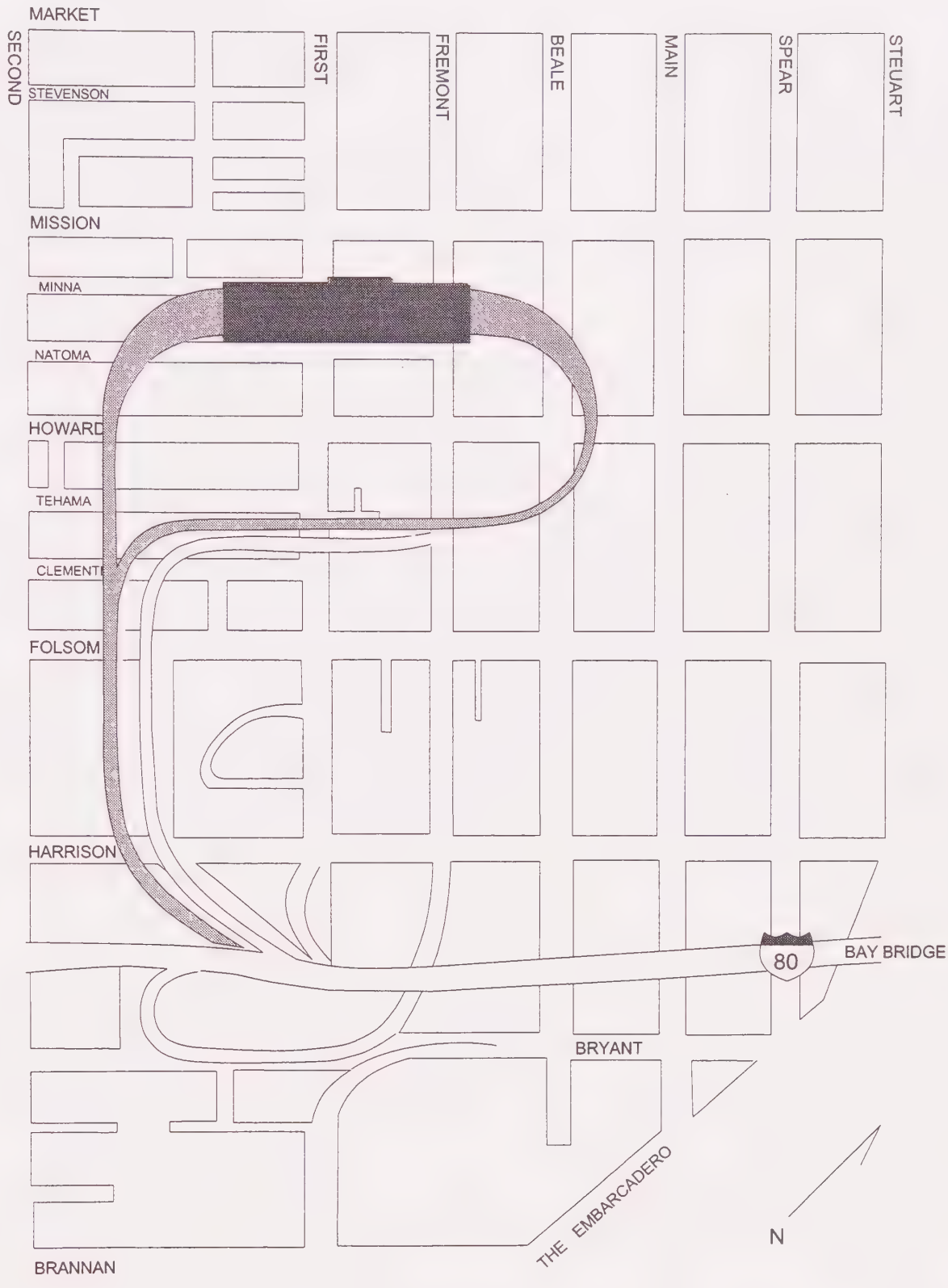
Carpooling in the Vicinity of TTT

The streets around the Transbay Transit Terminal are used by East Bay commuters to drop off casual carpool passengers during the morning peak period. Casual carpooling is a common practice used by East Bay commuters. Drivers pick up passengers going to the City in designated locations in order to be able to use the carpool lanes on the freeway before the toll plaza to the Bay Bridge. Since there is a considerable amount of automobiles stopping and dropping off passengers and pedestrian traffic associated with this activity happening around the Transbay Transit Terminal, the impact on traffic around the Terminal is significant.

Most of the carpoolers take Fremont Street mid-block exit and drop off the passengers on Fremont Street at Howard, at the TTT or on Fremont Street near Market Street, depending on the destination of the driver. Most of the passengers getting off the cars walk to their destinations. However, some passengers go to the TTT or Fremont Street bus stops or the Embarcadero Station to use MUNI buses or Metro.

Casual carpooling is not practiced on the west bound direction during the evening commute period despite the fact that there is a carpool on-ramp on Sterling Street to the Bay Bridge. In the morning hours all commuters have one destination to the City which makes carpooling possible. Also, the use of HOV lane eliminates the toll and the wait at the toll plaza. In the afternoon peak period commuters have various destinations to the East Bay and therefore it is not possible to organize casual carpooling. Also, there is no toll in the east bound direction and there so there is less advantage to using the HOV lane and getting on the freeway is relatively easy.

The majority of the commuters that get to the City by casual carpooling take AC Transit back to the East Bay. This is reflected in the large gap between the morning and evening commute period transbay ridership of AC Transit. Due to the convenience and cost savings associated with it, many commuters in the morning hours have shifted from AC Transit to casual carpooling. As a result AC Transit has had to reduce its transbay service in the morning hours from the East Bay.



San Francisco Planning Department
Transbay Area Plan and Implementation Program

EXISTING TERMINAL BUILDING AND RAMPS

Figure 3

Diagram not to scale

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TABLE 1

1992 WEEKDAY TRANSIT RIDERSHIP AT AND AROUND THE TRANSBAY TERMINAL

TRANSIT CARRIER	# OF BUS STOPS	# OF BUS LINES	# OF ARRIVALS / DEPARTURES	# OF DAILY PASSENGERS*
INTERIOR BUS DECK				
AC Transit	23	33	653	13,000
Golden Gate Transit	4	6	275	600
Greyhound	13	1	86	2,500
Caltrans Bike Shuttle	Shares w/ AC (1)	1	7	50
Amador/Mike Lee Tours Peerless (Betty's Tours)	Shares w/ AC (1)	1	12	90
Gray Line (Tour)	Shares w/ AC (12)	6	45	2,500
Sacramento Charter	1	1	4	90
SUBTOTAL	41	49	1,082	18,830
EXTERIOR HUMP AND CRESCENT				
Sam Trans	3	6	269	1,850
SF Muni	4	4	1,003	5,850
SUBTOTAL	6	10	1,272	7,700
On First, Fremont & Natoma Streets **				
Amtrak (prior to June 1993)	3	1	24	1,000
Green Tortoise ***	1	1	2	70
Golden Gate	7	20	364	3,380
Silverstar	1	1	4	20
Falcon	1	1	2	10
SUBTOTAL	13	24	396	4480
Grand Total 1992	61	83	2,750	31,010

Source: Staff Working Paper of the Transit Needs Study, MTC and Caltrans, October 1993 for 1992 Information.

* Boardings and Alightings

** Buses that terminate, originate and lay over on the block immediately surrounding the Transbay Terminal, plus First and Fremont between Mission and Market

*** Fewer buses November through May

●●●1994 Update: AC Transit had 14,208 daily passengers in 1994 with 769 arrivals/departures per day. Falcon and Amtrak service was discontinued, while Sierra Trailways and Peerless have begun service. SFO Airporter service is pending and would displace 1 Golden Gate Transit bus stop and have 280 arrivals/departures per day.

TABLE 2

1992-93 SPACE UTILIZATION AT THE TRANSBAY TRANSIT TERMINAL AREA, (SQUARE FEET)

TYPE OF SPACE	TRANSIT CARRIER												
	AC Transit	Golden Gate Transit	S.F. Muni	SamTrans	Greyhound	Gray Line Tour	Amtrak	Amador**	Falcon	Green Tortoise	Silver Star	Common Space	GRAND TOTAL
Bus Parking & Circulation Area Near Platforms (Caltrans Property)	55,150	9,200	14,000	3,500	22,500	Shares w/AC		Shares w/AC					104,350
Passenger Loading/Unloading (Caltrans Property)	33,400	4,500	2,500	1,400	11,000	Shares w/AC	1,500	Shares w/AC	400	400	500		55,600
Bus Parking Area on City Streets		3,600		600			1,500		400	400	500		7,000
Passenger Loading/Unloading on City Sidewalks		3,600		600									4,200
Bus Storage (Terminal Property)	47,000												47,000
Private Ticketing Office/ Storage/Toilets/Misc.	1,830				7,845	750	1,180*	1,210			1,030		13,845
Vacant Office Space												9,000	9,000
Package Express/Baggage Handling					12,240		480*						12,720
Passenger Waiting Area					1,300		840*					24,300	26,440
Common Restrooms												3,000	3,000
Retail Services												7,830	7,830
Corridors, Ramps												72,000	72,000
Garage Parking												156,000	156,000
Utility Space												30,000	30,000
GRAND TOTAL	137,380	20,900	16,500	6,100	54,885	750	5,500	1,210	800	800	2,030	302,130	548,985

Source: Staff Working Paper of the Transit Needs Study, MTC and Caltrans, October of 1993

Notes:

1. Square footage shown on third and fourth rows is City property.
2. Gray Line Sacramento and Caltrans Bike Shuttle share bus parking/circulation space and passenger loading/unloading space with AC Transit
3. Surface parking under ramps (including vanpool parking) not measured.

* *Projected for late 1993* ** *Amador space shared with Sierra Trailways and Peerless (Mike Lee Tours and Betty's Tours are ticketing agents)*

TABLE 3

1993 MIDDAY BUS STORAGE USE OF THE MAJOR TRANSIT CARRIERS

TRANSIT CARRIER	NUMBER OF BUSES	LOCATION
Terminal Building		
AC Transit	40 - (80)	Bus Deck
Gray Line	12	Bus Deck
Outside Terminal Building		
Golden Gate Transit	128	160 Harrison
Sam Trans	40	8th/Harrison

Source: Staff Working Paper of the Transit Needs Study, MTC and Caltrans, October 1993 and San Francisco Multi Operator Downtown Bus Storage Facility Feasibility Study, December 1992

00 During School Days
(00) During School Holidays

TABLE 4
1993 PEAK PERIOD SERVICE LEVELS AND RIDERSHIP
(TRANSIT OPERATORS ONLY)*

Number of Bus Arrivals and Departures, AM Peak Period

	AC Transit (**)	Muni	SamTrans	Golden Gate	TOTAL
6:30-6:59	29 (38)	18	12	22	81 (90)
7:00-7:29	54 (62)	27	12	32	125 (133)
7:30-7:59	53 (52)	37	13	46	149 (148)
8:00-8:29	44 (46)	41	7	50	142 (144)
8:30-8:59	21 (23)	38	7	43	109 (111)
TOTAL	201 (221)	161	51	193	606 (626)

Number of Bus Arrivals and Departures, PM Peak Period

4:00-4:29	28 (31)	45	14	32	119 (122)
4:30-4:59	50 (52)	44	10	39	143 (145)
5:00-5:29	54 (63)	45	9	53	161 (170)
5:30-5:59	47 (58)	32	7	35	121 (132)
6:00-6:29	38 (41)	26	9	23	96 (99)
TOTAL	217 (245)	192	49	182	640 (668)

Number of Passenger Boardings and Alightings, AM Peak Period

6:30-6:59	782 (585)	118	94	89	1083 (886)
7:00-7:29	1305 (1060)	190	126	99	1720 (1475)
7:30-7:59	1156 (1083)	203	101	141	1601 (1528)
8:00-8:29	1115 (1032)	170	85	134	1504 (1421)
8:30-8:59	501 (513)	172	65	82	820 (832)
TOTAL	4859 (4273)	853	471	545	6728 (6142)

Number of Passenger Boardings and Alightings, PM Peak Period

4:00-4:29	303 (627)	164	121	484	1072 (1396)
4:30-4:59	1114 (1127)	212	66	580	1972 (1985)
5:00-5:29	1500 (1561)	218	96	816	2630 (2691)
5:30-5:59	1268 (1229)	148	69	440	1925 (1886)
6:00-6:29	706 (720)	146	49	275	1176 (1180)
TOTAL	4891 (5264)	888	401	2595	8775 (9148)

* Add 7-10% to totals when other bus carriers use the Terminal, in addition to the four carriers listed above. Add another 6% to service levels and unknown number to ridership if SFO Airporter uses the Terminal.

** 1994 updates provided by AC Transit

Source: Staff Working Paper of the Transit Needs Study, MTC and Caltrans, October 1993.

3. Transit Usage Trends

Changes in peak hour and peak period transit ridership in the downtown area between 1981 and 1993 are documented in Tables 5 - 6. In general, the figures for transit ridership have remained stable. BART ridership declined after the 1986 fare increase, but was restored to and exceeded pre-1986 ridership levels most significantly after the 1989 Loma Prieta Earthquake. AC Transit experienced notable losses over the time period. The tables also reflect a lesser decline in Muni ridership, although this may be attributed in part to a difference in the methodology of collecting ridership data between 1985 and 1993. The overall absence of growth in transit ridership over this period of time may be attributable, in general, to the following factors:

- increases in transit ridership fares during the mid-1980's;
- continuing decline in real gas prices; (and)
- absence of overall growth in the number of jobs in the downtown area; and
- improved metering on the Bay Bridge which increased its peak hour traffic capacity.

TABLE 5
DOWNTOWN TRANSIT RIDERSHIP AND CAPACITY: 1981, 1985, 1989 AND 1993
P.M. PEAK HOUR

Transit Operator		1981		1985		1989		1993	
		Riders	Seats	Riders	Seats	Riders	Seats	Riders	Seats
Muni Northeast		6,500	6,100	7,400	6,300	5,700	5,700	4,800	5,400
Muni Northwest		7,600	6,500	8,600	7,000	8,100	7,300	6,300	6,700
Muni Southwest		12,500	9,300	11,900	10,900	10,200	8,900	8,700	8,500
Muni Southeast		4,900	5,000	5,400	5,200	5,800	6,400	4,600	5,800
Muni Total		31,500	26,900	33,300	29,400	29,800	28,300	24,400	26,400
Golden Gate Transit	Bus	4,800	5,300	3,600	4,800	2,600	4,000	2,800	3,600
	Ferry	700	1,400	700	1,000	1,000	1,300	900	1,300
BART	Transbay	14,800	10,500	14,600	10,800	13,700	11,500	15,900	12,000
	Westbay	7,200	7,000	7,000	7,400	6,700	8,600	7,700	8,400
	BART Total	22,000	17,500	21,600	18,200	20,400	20,100	23,600	20,400
AC Transit		8,500	9,700	7,800	9,200	4,400	6,200	2,200	4,000
SamTrans		1,800	1,700	1,600	1,900	1,500	2,000	1,300	1,800
CalTrain		2,900	5,100	2,700	4,300	2,200	3,900	2,300	3,800

Sources: Downtown Plan Final Environmental Impact Report, Mission Bay Final Environmental Impact Report, Downtown Plan Monitoring Reports for 1989 and 1994. All data supplied by each transit operator. Muni ridership figures for 1981 and 1985 not directly comparable to those for 1989 and 1993 due to methodological differences in Muni's ridership data development techniques.

TABLE 6
DOWNTOWN TRANSIT RIDERSHIP AND CAPACITY: 1981, 1985, 1989 AND 1993
P.M. PEAK PERIOD

Transit Operator		1981		1985		1989		1993	
		Riders	Seats	Riders	Seats	Riders	Seats	Riders	Seats
Muni Northeast		12,000	11,900	13,200	10,900	10,200	9,700	8,900	10,000
Muni Northwest		12,600	11,600	13,400	12,000	12,700	12,500	11,700	12,500
Muni Southwest		22,000	17,700	21,000	18,700	17,900	15,300	16,200	15,700
Muni Southeast		8,400	9,100	9,000	9,100	10,000	11,100	8,600	10,700
Muni Total		55,000	50,300	56,600	50,700	50,800	48,600	45,400	48,900
Golden Gate Transit	Bus	7,000	8,400	5,800	8,300	4,300	6,600	4,800	6,000
	Ferry	900	1,800	800	1,300	1,700	3,200	1,500	3,200
BART	Transbay	23,300	16,800	24,800	18,900	22,900	20,900	25,900	21,100
	Westbay	10,600	14,100	11,100	16,000	11,500	18,000	13,300	16,500
	BART Total	33,900	30,900	35,900	34,900	34,400	38,900	39,200	37,600
AC Transit		12,800	14,700	11,600	13,800	7,500	10,700	3,700	7,800
SamTrans		2,700	2,600	1,900	2,600	2,300	3,100	2,300	3,200
CalTrain		4,100	6,600	3,500	5,900	3,100	5,800	3,200	5,500

Sources: Downtown Plan Final Environmental Impact Report, Mission Bay Final Environmental Impact Report, Downtown Plan Monitoring Reports for 1989 and 1994. All data supplied by each transit operator. Muni ridership figures for 1981 and 1985 not directly comparable to those for 1989 and 1993 due to methodological differences in Muni's ridership data development techniques.

Of all the transit operators studied, only AC Transit provides transit service in San Francisco exclusively to the Transbay Transit Terminal, and there it provides service exclusively to the bus deck. The determination of sufficient bus deck capacity for the future needs of AC transit ridership must take into account the following considerations: while capacity was sufficient when AC Transit ridership was significantly greater fifteen years ago, the bus deck at that time was not shared with as many other transit, shuttle and tour bus operators as it is now.

After the removal of rail service in 1958, AC Transit and Greyhound commuter service were the only operators on the bus deck. The *1981 SFBATTA Phase III Project Development Proposal* prepared by PBQ & D/SOM 1981 listed three operators besides AC Transit using the bus deck: Golden Gate Transit (which originally served the Terminal exclusively at the street level), Greyhound Commuter and (unidentified) tour buses. Table 7 below is derived from this report, and provides counts of the number of vehicles using the bus deck daily, and in the a.m. and p.m. peak periods for 1980:

The bus deck of the Transbay Terminal was much more heavily utilized in the early 1980's than it is today. While there are currently seven operators on the bus deck, the daily average of arrivals and departures is much lower than it was in 1980. Table 8 below establishes that there were nearly 700 more weekday arrivals and departures of vehicles using the bus deck in 1980 than in 1992/1993:

TABLE 7
1980 AVERAGE DAILY AND PEAK HOUR VEHICLE VOLUMES
TRANSBAY TERMINAL BUS DECK

Transit Operator	Daily		A.M. Peak Hour		P.M. Peak Hour	
	in	out	in	out	in	out
AC Transit	762	720	228	49	51	215
Golden Gate Transit	113	114	9	9	10	9
Greyhound Commuter	19	19	16	0	0	16
Tours (unspecified)	58	58	0	0	0	0
Totals	952	911	253	58	61	240

Source: San Francisco Bay Area Transportation Terminal Authority: Phase III Project Development Proposal, Final Report, November 1981

TABLE 8
1980/1992-3 WEEKDAY ARRIVALS AND DEPARTURES AT TRANSBAY TERMINAL BUS DECK

Transit Operator	No. of Vehicle Arrivals and Departures	
	1980	1992-1993
AC Transit	1482	768*
Golden Gate Transit	227	275
Greyhound Commuter	38	-
Greyhound Intercity	-	86
Caltrans Bike Shuttle	-	7
Amador/Mike Lee & Betty's	-	12
Gray Line (tour)	-	45
Gray line (Sacramento commute)	-	4
Tours (unspecified)	116	-
Totals	1863	1197

*Figure for 1994 provided by AC Transit
Source: Transbay Transit Terminal Current and Future Needs Study, Staff Working Paper. October 1993

San Francisco Planning Department

Transbay Area Plan and Implementation Program

ON STREET TRANSIT VOLUMES

Figure 4

Diagram not to scale

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Transbay Area Plan and Implementation Program

TRANSIT PREFERENTIAL STREETS

Figure 5

Diagram not to scale

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4. *Traffic conditions*

Many of the streets in the Transbay Area Plan study area are identified as primary arterial and/or Transit Preferential Streets in the Master Plan. These streets are also in the Congestion Management Program roadway network.

Some of these streets serve a dual function as primary arterial and transit streets in the study area. Both First and Fremont Streets, located to the east and west of the existing Terminal, are primary arterial and transit preferential streets. Mission Street to the north of the Terminal and Market Street, one block to the north of the Terminal, are both transit preferential streets with heavy transit service. Howard Street to the south of the Terminal and Folsom Street one block to the south of the Terminal are primary vehicular streets. Other transit preferential streets in the study area are Second Street, Third Street, Harrison Street, Main Street, Beale Street, and Steuart Street. Harrison Street and the Embarcadero are also primary vehicular streets.

Prior to the Loma-Prieta earthquake, access to employment centers in the north of Market area was through the elevated Embarcadero Freeway and its associated ramps. As a result of earthquake damage to these elevated freeway structures and subsequent removal of the Embarcadero Freeway and the Terminal Separator Structure, traffic patterns have changed considerably in the downtown area. Post-earthquake freeway access to the East Bay and the Peninsula is only provided through the ramps in the South of Market area. As a result, traffic volumes on surface streets have increased in the South of Market area, particularly in the vicinity of the Transbay Terminal.

Fremont Street, which carries north-bound traffic, is the major access to the north-eastern quadrant of the City from the East Bay, and has heavy traffic volumes in the A.M. peak period. First Street, a southbound street, is the main freeway access to the East Bay and experiences congestion in the P.M. peak period. Other streets leading to the east-bound ramps such as Harrison Street, the Embarcadero Roadway and Folsom Street also experience congestion in the P.M. peak period. Streets with access to and from I-80 West/US 101 South are congested in both the A.M. and P.M. peak periods, especially Third and Fourth Streets. These streets provide access to and from the closest ramps to the southbound freeway structure.

Streets connecting the ramps to the North of Market area have also experienced substantial growth in traffic volumes which has increased conflicts with transit service on key north/south streets including First, Fremont, Third and Fourth Streets. Overall increased traffic volumes in the South of Market streets and particularly in the vicinity of the Transbay Terminal have slowed all vehicular traffic and impacted transit operations in the area.

San Francisco Planning Department

Transbay Area Plan and Implementation Program

TRAFFIC COUNTS

Figure 6

Diagram not to scale

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5. *Pedestrian Conditions*

On the streets adjacent to the Terminal pedestrian volumes average 2000 pedestrians per hour during the commute peaks. A number of alleyways and private mid-block walkways in the area are also used as shortcuts to the Terminal, especially Ecker Street between Market and Mission which has been extensively improved as a pedestrian street. These routes are often used as alternatives to avoid walking along the heavily-trafficked primary streets, particularly the Mission, First and Fremont. Generally, the sidewalks in the area are 12'-15 and the pedestrian Level of Service on the surrounding streets is in the B/C range and occasionally D on Fremont and First Streets. The corner/crosswalk areas are in the C/D range due to sidewalk capacity reductions by the high number of sidewalk obstacles (newsracks, light standards, transit shelters, etc).

Pedestrian use of the mid-block shortcuts and alleys creates numerous dangerous conditions on the primary streets due to jaywalking conflicts. The Muni boarding island on Fremont also contributes to the jaywalking problems. Between 1987-1992, there were 12 mid-block pedestrian-vehicle accidents in the area around the Terminal. There were an additional 48 accidents at intersections within two blocks of the Terminal.

Within the study area, the Downtown Streetscape Plan classifies Mission Street as the most significant pedestrian street in the district, one that would warrant special attention with a particular focus on the pedestrian-transit connections. New Montgomery, Second, and Steuart Streets are designated as "Second Level" streets appropriate for a wide range of pedestrian-oriented improvements. Minna, Ecker, and Shaw Streets, and the Terminal Separator right-of-way are identified as potential pedestrian connections within the south of Market area (see Figure 8)

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PEDESTRIAN COUNTS

Figure 7

Diagram not to scale

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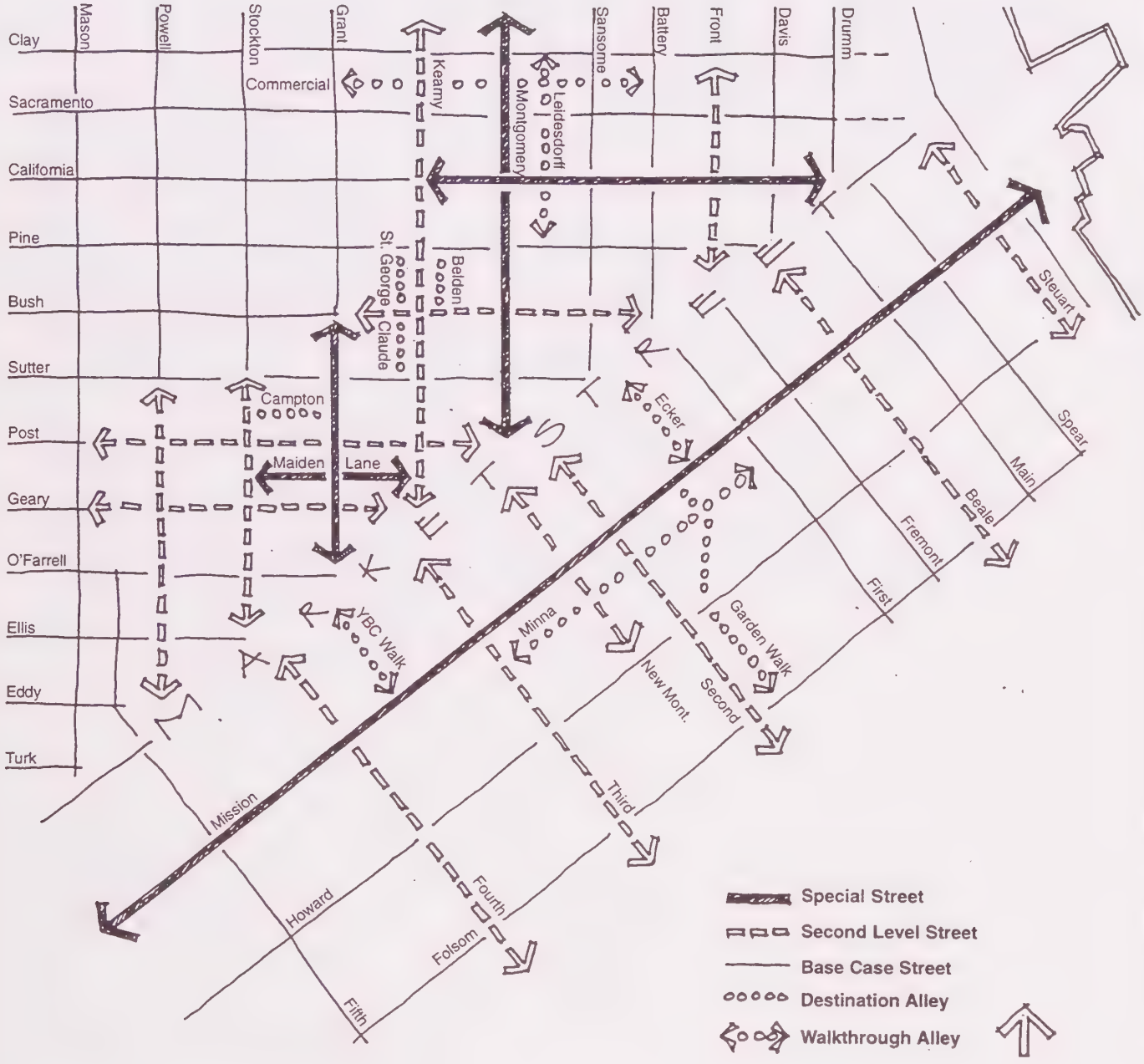

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DOWNTOWN STREETSCAPE PLAN

Figure 8

Diagram not to scale

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B. PROJECTED TRANSIT NEEDS

1. *Transit Needs Study Summary*

a. Transbay Transit Terminal

A staff working paper of the Transit Needs Study, dated October 1993, was prepared by the Metropolitan Transportation Commission (MTC) and Caltrans to identify existing uses and deficiencies, as well as future needs of the Transbay Transit Terminal (TTT). The study was conducted at the request of Caltrans and the City of San Francisco with input from both agencies and transit operators.

The Transit Needs Study, relevant to the projected future operational needs of the Terminal, is summarized in this report in order to define the transit program and parameters for potential future transit services using the Terminal. The staff working paper provides a detailed portrait of projected transit service needs as they affect the Transbay Transit Terminal. The study was intended to assist Caltrans and the City in assessing whether substantial investments should be made in the existing Terminal or, if other development options are explored, what specific transit parameters would need to be addressed.

Projected Future Transit Service Needs

To determine the future needs of the Terminal facility, both bus services and potential rail extension services were considered. Transit operators were asked to provide twenty year projections, with 1993 being the base year, to identify future bus service needs. For rail extension services, all potential rail projects were examined. Table 9 (1992,1994, and Projected 2013 Daily Bus Operations at the Transbay Transit Terminal Site) provides a comparison of the uses in 1992 and potential future needs of the bus operators of the Terminal facility. This table is updated based on the Planning Department's contacts with the major transit operators to reflect the daily bus operation at the TTT for 1994.

In general, the Transit Needs Study projected that bus service to the Terminal would increase by 2013, and the number of passengers using the Terminal facility would almost double over the same period. The largest increase in service was assumed for AC Transit and Greyhound. MTC travel demand forecast for the year 2010 projects a 112 percent increase for AC Transit's ridership to San Francisco on the transbay bus lines. The 112 percent increase is based on the total daily travel increase from 1990 to 2010, a 7 percent increase in transit's share of total travel, AC Transit's 1990 ridership, and BART's headway reducing from 3.75 minutes to 2.15 minutes (while holding to a load factor of 1.15, less than the present 1.49). AC Transit projected that its service would increase by 169 percent, and Greyhound expected that its service would increase by 80 percent if projected growth occurred. AC Transit's growth

projections were substantially greater than the 112 percent (or less) growth projected for AC Transit based on results from MTC's regional transportation model. As part of the study we will utilize updated MTC data and the consultant will evaluate the assumptions made to project the future ridership demand for AC Transit and other operators.

Based on projections in the Transit Needs Study, AC Transit would require forty bus berths on the third floor deck. Overall for the Terminal site and adjacent streets, the need for additional bus berths would increase from the existing 61 to 82 passenger boarding areas.

The four rail services with a terminus at or near the Terminal site that were considered are:

- Muni Rail Line Extensions,
- CalTrain Downtown Rail Extension,
- High Speed Intercity Rail, and
- Bay Bridge Rail Extension, "Bay Link."

There are many uncertainties associated with most of the rail extension projects. Many of these projects are at preliminary stages of study. Implementation of any of these proposals is contingent upon a number of major issues such as funding, engineering feasibility studies, environmental impact analysis, etc.

The existing Transbay Transit Terminal building does not have the capacity to accommodate many of the bus service needs projected for the next twenty years without significant modifications. It is also unlikely that the rail projects could be accommodated in the existing terminal without substantial design changes. The Transit Needs Study notes that:

> *" All of the rail proposals addressed in the report that would terminate at or near the Terminal would require significant redesign of the existing Terminal and could likely require rebuilding of the facility. "*

TABLE 9

1992, 1994, AND PROJECTED 2013 DAILY BUS OPERATIONS AT THE TRANSBAY TRANSIT TERMINAL SITE

	# of Bus Stops	Daily Bus Arrivals And Departures #	# of Passengers per Day	Midday Bus Storage Need
Interior Bus Deck				
1992	41	1,082	18,830	
2013	59	2,423	43,450	
Percentage Increase	43.9	123	130.7	
Exterior Hump and Crescent				
1992	7	1,272	7,700	
2013	9	1,497	9,020	
Percentage Increase	28.6	17.7	17.1	
On First, Fremont & Natoma				
1992	13	396	4,480	
2013	14	469	5,150	
Percentage Increase	7.7	18.4	14.9	
Total				
1992	61	2,750	31,010	87
2013	82	4,389	57,620	200
Percentage Increase	34.4	59.6	85.8	129.9

Source: 1993 Staff Working Paper, the Transit Needs Study, MTC and Caltrans,.

1994 Update: SamTrans has increased their projected midday bus storage needs from 20 to 40 buses, for a total storage requirement of 220 buses.

b. Muni Steuart Street Transit Terminal

Existing and Proposed

Eleven Municipal Railway bus lines serving the Market and Mission Street corridors use the Bus Terminal Facility at Mission and Steuart Streets, carrying over 128,000 daily riders. They are line numbers 2, 7, 8, 9, 14, 14L, 14X, 21, 31, 66 and 71. The 2, 9, 14L and X, 66 and 71 are diesel motor coaches, and the rest are trolley coaches. The 9, 14, 14L and X and 31 are articulated (60-foot long) buses. During the peak hour, 70 to 80 buses use the terminal, and each weekday the count is over 660 buses.

The replacement of the 8-Market trolley coach with the F-Market streetcar, and in one potential scenario, the consolidation of the 7-Haight with the 71-Noriega (trolley coach) will effectively reduce the number of bus lines using the Steuart Street terminal to nine. However, an extension of the 3 and 26 lines and the F-Line loop tracks providing a direct connection to the terminal addition would increase the number to twelve. Table 10 provides a summary of ridership, frequency of service and total number of buses for lines that currently and are proposed to serve the Steuart Street Terminal.

Terminal Operational Issues

Muni advocates maintaining the terminal at the same site after the completion of the Mid-Embarcadero Open Space Project, citing the additional costs of shuttling the buses to any other site once they have terminated their runs. Layover space for the eleven bus lines is needed at the end of their runs to allow for managing line operations, including schedule recovery and operator relief. Keeping these eleven lines at the same site is desired for economies-of-scale.

Muni also states a need to expand the terminal 40 feet eastward to accommodate articulated buses and the expansion of bus service in the area. Bus service expansion is predicted by Muni based on the attraction of the area adjacent to the renovated Ferry Building, and the increase in ferry services. Other reasons cited for maintaining the site include the costs and difficulty of acquiring a new and suitable site (the current terminal is owned by Muni) and the efficacy of the current site's proximity to the Ferry Building for improved regional transit connections. The planned expansion and maintenance of the site have been designed in conformance with the urban design criteria of the Mid-Embarcadero area, and include a direct connection to the F-Line streetcar. The ventilation shaft for the Muni Metro Extension to Mission Bay has also been taken into consideration.

TABLE 10

1993-94 MUNI STEUART STREET TERMINAL OPERATIONS SUMMARY

Muni Line Number: (existing Terminal service)	Daily Ridership[5]	Service Frequency (min): peak hr/midday	Total # buses : peak hr/ daily
2	6,539	10-12/20	5-6/49
7	6,707	8-9/12	7-8/70
8[1,2]	8,017	8-10/15	6-7/
9	16,645	8/10-15	7/77
14	47,347	5/6-10	12/171
14L[3]	4,822	18/18	3/
14X[3]	2,136	8-9/	6-8/
21	11,197	6/10-20	10/108
31	16,697	8-9/12-15	6-8/100
66	1,511	20/20	3/54
71[1]	9,961	10/12-20	6/88
Totals	131,579		71-78/717
Proposed Municipal Railway Lines Serving Steuart Bus Terminal			
3[2]	4,802	10/20	6/
26[2]	6,388	15/20	4/
F[2,4]	3,317		

Source: Transbay Terminal Area Plan Study Memorandum, SF Municipal Railway. Jan. 31, 1995

Notes:

1 Muni line proposed for elimination through consolidation: 8 replaced with the F, 71 merged with the 7.

2 Frequency and number of buses data obtained through Muni Schedule. Daily bus numbers not available for these lines.

3 Complete daily frequency schedule/number of buses not applicable/provided. X lines operate during peak periods only.

4 F line operated on partial route while 8 Market was in operation.

5 Ridership figures from Muni 1993 Short Range & Capital Improvement Plan The Muni terminal is currently located on Steuart Street at Mission.

2. *Transit Operators' Plans*

AC TRANSIT SHORT RANGE TRANSIT PLAN
Fiscal Years 1994-2003

Relationship to the Transbay Area Plan: There are 33 AC Transit lines that provide transbay service from the East Bay (parts of Alameda and Contra Costa Counties) to the Transbay Terminal. AC Transit operates Transbay service from San Francisco to the East Bay cities of Alameda, Albany, Berkeley, El Cerrito, Emeryville, Hayward, Oakland, Piedmont, San Leandro, as well as the adjoining unincorporated areas such as Ashland, Castro Valley, Cherryland, El Sobrante, Kensington, and San Lorenzo.

Summary: Transbay service on the N, NL, and O lines is planned to be increased from 30-45 minutes midday to 15 minutes as part of a grid network.

Findings: Anticipated increased usage of the Terminal by AC Transit buses.

Status: This Plan is generally updated biannually.

AC TRANSIT DRAFT TRANSBAY COMPREHENSIVE PLAN
AC Transit, January 18, 1995

Relationship to the Transbay Area Plan: Evaluation of future AC Transit's transbay bus service to the Transbay Terminal.

Summary: Study of service improvements which could be made on the transbay bus lines to increase cost effectiveness and efficiency. Study of current service levels and assessment of future demand to the Transbay Terminal.

Findings: The report recommended:

- Spliting transbay service into two service types: transbay basic and transbay express.
- Creating more effective bus stop spacing for existing transbay routes.
- Performing a comparison of AC Transit's market competitiveness with other commute modes and recommendations to make the service viable.
- Eliminating transfer fees to make the transbay service more marketable.

Status: ongoing

SAN FRANCISCO MUNICIPAL RAILWAY SHORT RANGE TRANSIT PLAN AND CAPITAL IMPROVEMENT PLAN

Fiscal Years 1993-2002

Relationship to the Transbay Area Plan: Muni lines that terminate at the Transbay Terminal are reviewed for proposed changes in service over the next decade.

Summary: The Transbay Terminal is the terminal for four current Muni lines: the 5 Fulton, the 6 Parnassus, the 14L Mission Limited, the 38 - 38L Geary. The F Market Historic Trolley projected to begin operations in 1995, will also terminate at the Transbay Terminal until the tracks are extended from Market Street north up the Embarcadero in 1999.

Findings: The following lines were identified in the list of potential service reductions: reduction of frequency for Owl (all-night) service beginning at 12:30 a.m. for the 5, 6 and 38. Only two of the lines were identified for other planned/potential service changes: the Geary corridor (on which the 38 and 38L run) is being studied for conversion to a light-rail corridor that may or may not terminate at the Transbay Terminal.

Status: The Muni Capital Improvement Plan is updated annually and the Short Term Plan is updated biannually.

GOLDEN GATE BRIDGE, HIGHWAY AND TRANSIT DISTRICT (GGBHTD) SHORT RANGE TRANSIT PLAN and ADDENDUM

Fiscal Years 1993/94-2002/03, 1994/95-2003/04

Relationship to the Transbay Area Plan: GGBHTD bus lines 10, 20, 30, 50, 60, 70, 80 and 90 all use the Transbay Terminal bus deck from cities in Marin and Sonoma Counties. All other bus lines terminate on the streets surrounding the Terminal.

Summary: The Plans call for maintaining existing levels of transbay service. GGBHTD is studying running buses on Mission or Market Streets, which their service planners believe will increase transbay ridership. However, GGBHTD projects a general downturn in commuting traffic between Marin and San Francisco as fares increase, employment centers in the North Bay grow and the population remains relatively stable. Some of the replacement buses for service into San Francisco will have less capacity as well.

Findings: N/A

Status: These plans are generally updated annually.

SAMTRANS (SAN MATEO COUNTY TRANSIT DISTRICT) FIVE YEAR PLAN
Fiscal Years 1986/87-1990/91

Relationship to the Transbay Area Plan: Local and commuter SamTrans bus lines serve the Transbay Terminal and the downtown area of San Francisco.

Summary: Plans call for increased bus service along the 101 Corridor in San Mateo County, and to downtown San Francisco (particularly peak-period mainline service). Increased feeder bus service to BART and CalTrain stations in San Mateo County is also called for in the plan. The District supports extending CalTrain into downtown San Francisco, citing higher ridership on the train and buses resulting from the extension. The only downtown terminal site for the extension identified is the Transbay Terminal area.

Findings: N/A

Status: This Plan has been superseded and updated information will be incorporated in this document once current plans are obtained.

CALTRAIN PENINSULA COMMUTE SERVICE
FIVE YEAR PLAN
1988-1993

Relationship to the Transbay Area Plan: CalTrain is considering extending its service into downtown San Francisco and relocating its terminal to the site of the Transbay Terminal.

Summary: The assumption of the Transbay Terminal area as the site of a CalTrain terminal is derived from the recommendations of the 1984 Barton-Aschman's study. The extension, combined with an increase to 136 trains/day in scheduled service, would attract an increase of 38,000 - 44,000 riders per day, or, if parking costs in the downtown are increased significantly, 50,000-58,000 per day. To accommodate the 136-trains-per-day schedule, the Transbay Terminal site would have to provide 4-5 tracks about 1000 feet in length and an underground storage yard. Ridership projections also assume that job growth in San Francisco's downtown continues at the rate it held at the time of this document..

Findings: N/A

Status: This Plan has been superseded and updated information will be incorporated in this document once current plans are obtained.

C. TRANSIT TERMINAL STUDIES

STUDY OF THE TRANSBAY TRANSIT TERMINAL

District 4 Right of Way Office
July 1965

Relationship to the Transbay Area Plan: Assessment of potential redevelopment of the Terminal site.

Summary: This report valued the property and assessed its potential for redevelopment. Caltrans also obtained comments from the transit agencies.

Findings: Not relevant due to dated assumptions.

Status: Superseded.

TRANSBAY TERMINAL FUTURE UTILIZATION STUDY--INTERIM REPORT; PHASE II STUDY REPORT (SUMMARY AND FULL REPORT)

Metrecon Division, Larry Smith & Co., Inc., Economists; Livingston & Blayney, Planners; McCue Boone Tomsick, Architects.
March 1971

Relationship to the Transbay Area Plan: An evaluation of the future of the Transbay Terminal in anticipation of BART.

Summary: The Division of Bay Toll Crossings commissioned this study to determine the future of the Transbay Terminal after the expected startup of BART service in 1972. Quoting from the study, "As the Transbay Terminal may become available for sale or lease to private enterprise or public agencies upon commencement of transbay transportation service by the Bay Area Rapid Transit District in 1972-73, the purpose of our work program is to advise the Division on the optimum procedures to be followed in the leasing or selling of its interest in the property."

Related reports:

- Terminal Facilities Program and Design Criteria (McCue Boone Tomsick for Barton Aschman Associates), October 1973: This report details the function, space, and operation requirements for the Terminal and projects these to 1990.
- Air and Noise Quality Impact Report (Environmental Planning for Barton Aschman Associates), October 1973: Analysis of effect of alternative development proposals on air quality in San Francisco. Projection of ambient noise levels and suggested mitigation measures.

- Seismic Investigation of the Transbay Transit Terminal Site in San Francisco (Caltrans Translab for Headquarters Division of Administration Services), November 1973: analysis of ground under building site--no reference to the structure.
- Supplementary Air Quality Impact Report (Environmental Planning for Barton Aschman Associates), April, 1973: Supplement to the October 1973 report.

Findings: Not relevant due to dated assumptions.

Status: Superseded.

TRANSBAY TERMINAL TRANSPORTATION STUDY: PROJECT BACKGROUND/WORKING PAPER NO. 1
Barton-Aschman Assoc, Inc/Caltrans for the Calif. Toll Bridge Authority
October 1974

Relationship to the Transbay Area Plan: Study of the needs and functions of the existing Transit Terminal.

Summary: Examination of transportation functions, development activity and city objectives.

Findings: Not relevant due to dated assumptions.

Status: Superseded.

TRANSBAY TERMINAL: REVIEW OF EXISTING POLICIES, ISSUES, AND PLANNING AND SOCIAL GOALS: WORKING PAPER 1
DMJM
June 1976
Transbay Terminal: Alternatives Analysis and Patronage Update: Working Paper 2
DMJM
July 1976

Relationship to the Transbay Area Plan: Study of function of existing Terminal.

Summary: Cross reference of transportation policies, issues, and patronage forecasts.

Findings: No longer relevant due to dated assumptions.

Status: Superseded.

A STUDY TO ESTABLISH GUIDELINES: SUMMARY FOR PUBLIC REVIEW

For the San Francisco Bay Area Transportation Terminal Authority
DMJM/Lord & Le Blanc
Sept 1976

Relationship to the Transbay Area Plan: Study for developing guidelines addresses bus transit ridership and facilities at the existing Transbay Transit Terminal site, considers issues of expanding, demolishing and/or rebuilding existing terminal. Joint development potential is also addressed.

Summary: Guidelines for Development of a regional transit terminal are developed. The facility in all alternatives accommodates bus transit service only. The study includes bus transit terminal needs, growth and patronage trends and alternative responses, 1995 projected bus usage and devises development guidelines based on a matrix analysis. Contains demographic graphs, evaluation matrices, simple maps.

Findings: Recommended Development Guidelines grouped under five headings: General, Finance, Use and Circulation, Urban Design, and Operational & Program. Recommended Policies are presented, addressing Transportation, Finance and Operation. The Guidelines are intended to be used in response to AB 3694, establishing the development of a regional transit terminal in San Francisco.

Status: Inactive

SAN FRANCISCO BAY AREA TRANSPORTATION TERMINAL AUTHORITY (SFBATTA) REGIONAL TRANSIT TERMINAL FACILITY

PBQ&D-SOM
1978-81

Relationship to the Transbay Area Plan: This project undertakes a study of bus transit facilities and service needs at the existing Transbay Transit Terminal site, including joint development potential, direct connections to I-280, and urban design issues.

Summary: This series of reports on transit terminal development alternatives for use of newly-established SFBATTA is Phase III of a four-phase study: Phase I is start-up and administrative, Phase II is establish policies and guidelines for development, Phase III is project development proposal, and Phase IV is implementation.

All of working papers below are in Phase III.

- Working Paper #1: Evaluation Factors and Procedures, Mar 1978
- Working Paper #2: Preliminary Architectural Space Program, May 1978
- Working Paper #3: Joint-Use Market and Financial Implications, Jun 1978
- Working Paper #4: Preliminary Lease & Inter-Agency Agreements, Oct 1978
- Working Paper #5: Funding Sources, Jul 1978

- Working Paper #7: Draft Commuter Bus Operations Study, Aug 1978
- Working Paper #8: Alternatives Analysis, Aug 1978
- Working Paper #9: Route 280 Bus Connection, Sept 1978
- Working Paper #10: Evaluations and Recommendations, Oct 1978
- Working Paper #10: Appendix, Oct 1978
- Working Paper #11: Evaluation of Funding Sources, Oct 1978
- Summary Consultant Recommendations, 1978
- Operational Research Study on Bus Passenger Loading, Oct 1981
- Phase III Project Development Proposal: Final Report, Vol 2, Nov 1981
  Draft tables, photographs and figures
- San Francisco Transbay Terminal, July 1981. Plans (only) of existing terminal building modified by consulting architects, reduced to 81/2" X 11" format.
- Finding of No Significant Impact/Final EIR, UMTA, Feb 1982

Findings: Four different strategies for the terminal were evaluated: rehabilitation, expansion on site and off-site, and a new facility. Four alternative routes connecting the terminal to I-280 are evaluated: Colin P. Kelly, Sixth Street, Second Street and a "no action" alternative. Three basic joint use alternatives are identified: no change, open space, and the joint development of an office building.

The rehabilitation of the bus transit terminal on an expanded terminal site is recommended, with no elevated connection to I-280, and the maintenance (but not immediate implementation) of an option for joint development with an office structure. Findings on the design of a the facility include recommendations on bus berth design, fare collection, bus operations control, passenger access, passenger/vehicle interface, passenger information system, and passenger security. Funding recommendations include retaining a bond advisor to secure favorable revenue bond terms, seeking additional policy and administrative guidance from UMTA, commencing formal discussions with carriers, and the use of bridge tolls to fund annual costs.

Status: Inactive.

PROJECT STUDY REPORT FOR TERMINAL UPGRADE
Caltrans Public Transportation Office
September 1989

Relationship to the Transbay Area Plan: Architectural assessment of the Terminal.

Summary: Early, general proposal to rectify Terminal code deficiencies and upgrade aesthetics without substantial bus capacity increase.

Findings: Not relevant due to seismic changes.

Status: Superseded.

TRANSBAY TERMINAL RENOVATION PROJECT STUDY

Division of the State Architect
April 1992

Relationship to the Transbay Area Plan: Architectural assessment of the existing conditions at the Terminal.

Summary: Documents Transbay Terminal code deficiencies in detail, using large-scale floor plans and appendices. The report focuses on seismic safety, fire exiting, disabled access, asbestos, and bus deck air quality.

Findings: The report recommends a program to rectify deficiencies, and simultaneously install a more inviting interior layout primarily on the street and mezzanine levels of the Central Unit. The study identifies short-term and long-term improvements measures for the terminal. The work items identified under the short-term improvements are: fire protection/sprinkler system, fire exiting, seismic improvement, electrical/ signal/lighting, plumbing/restroom-waiting room improvements, HVAC improvements, elevators/Handicapped accessibility, building security, video monitoring system and noise abatement at the bus deck.

Status: Current.

SEISMIC EVALUATION OF THE TRANSBAY TRANSIT TERMINAL FOR THE OFFICE OF THE STATE ARCHITECT

Albert C. Martin & Assoc
June 1992

Relationship to the Transbay Area Plan: Assesses the strengthening and costs thereof necessary to maintain the Transbay Transit Terminal in the existing facilities.

Summary: Description of existing facility (which is structurally divided into six separate buildings), testing methods, site seismicity, evaluation criteria, seismic behavior and deficiencies, recommended seismic strengthening and cost estimates. Photographs, plans and detailed diagrams are included in the analysis. Three different strengthening schemes were analyzed, all utilizing reinforced concrete sheer walls and steel frames.

Findings: The costs of the three seismic strengthening schemes ranged from $11.9 - 18.3 million (in 1992).

Status: Supplemented by three reports from the Office of the State Architect, and cited as a reference in the EIR published in August 1994.

SAN FRANCISCO MULTI-OPERATOR DOWNTOWN BUS STORAGE FACILITY FEASIBILITY STUDY

Parsons De Leuw, Inc., for Regional Transit Association of the San Francisco Bay Area, December 1992

Relationship to the Transbay Area Plan: Currently AC Transit and other operators use the ramps of the Transbay Terminal for midday bus storage purposes.

Summary: This reports studies AC Transit and other private and public bus operators storage needs serving the Transbay Terminal and the downtown area. It identifies the economic, operational and other factors that will influence the suitability of potential storage sites. The report also explores the availability of potential sites.

Findings:

- There is a clear need to provide for storage of commute and other buses in downtown San Francisco.
- The potential midday bus storage demand for the public and private operators range from 190 vehicles to 380 vehicles for the future. The lower bound estimate assumes very little growth in the commute bus fleet for the future. The high end estimate assumes all projected service growth will be implemented.
- There are considerable cost savings for the public bus operators to store buses midday in the downtown area rather than having to deadhead back to storage facilities outside downtown San Francisco.
- Market conditions and financial requirements for bus storage in the downtown area are analyzed.
- Eight sites were evaluated for potential acquisition/development for storage. A specific site was not recommended for storage facility development.

Status: Completed

TRANSBAY TRANSIT TERMINAL HISTORIC RESOURCE EVALUATION REPORT

Marjorie Dobkin for Caltrans District 4 Environmental Analysis South Office October 1993

Relationship to the Transbay Area Plan: Historical assessment of the Terminal.

Summary: This report provides documentation of the significant features and integrity of the Terminal and a presentation of general guidelines for conservation of building materials. It includes a detailed history of the facility from early planning through initial construction to recent modifications, and historic photographs and detailed floor plans, with color coding indicating degree of environmental relevance of specific elements.

Findings: The report focuses on architectural elements which contribute significantly to its historical landmark status under state and federal environmental laws, and details how they have been compromised

.

Status: Current.

TRANSBAY TRANSIT TERMINAL CURRENT AND FUTURE NEEDS STUDY

Metropolitan Transportation Commission and Caltrans Public Transportation Office
December 1993

Relationship to the Transbay Area Plan: Assesses current and future usage of the Terminal.

Summary: Quantifies current and projected future transit service and passenger use levels at the site.

Findings: Recommends minimum facility requirements and planning process for development

Status: Supplemented by three reports from the Office of the State Architect, and cited as a reference in the EIR published in August 1994 (See the Transit Needs Summary in this Background Data Report).

TRANSIT TERMINAL STUDY

The Planning Department-City and County of San Francisco
November 1993

Relationship to the Transbay Area Plan: An examination of three alternatives for a downtown transit terminal.

Findings: The principal focus of this report was on three alternatives which developed a new transit terminal to satisfy future transit needs. A collateral benefit of these alternatives was the creation of opportunities for other land use development. The basic premise was that use of the existing Transbay Transit Terminal site for other land uses would require development of a suitable replacement transit terminal. Another premise was that land which is currently in public ownership would primarily be used to site a replacement facility. Since rebuilding of the Terminal Separator Structure was still under active consideration at the time the study was conducted, the land considered available for a bus terminal was also circumscribed.

Alternative A utilized the existing Transbay Transit Terminal site and adjacent properties to build a new underground and surface level transit terminal with opportunities for joint development of other land uses above the ground level. Alternative B created the opportunity to use the Transbay Transit Terminal site and adjacent properties for other land uses and proposes a new replacement transit terminal in the right-of-way formerly occupied by the Main and Beale freeway ramps for the Terminal Separator Structure north and south of Howard

Street. Alternative X expanded the existing terminal vertically by adding a second bus deck. Rail services were provided underground for all three alternatives.

- Alternative B, which sited a new transit terminal at Main/Mission/Beale/Howard and creates opportunities for development of new land uses at the existing Transbay Transit Terminal site, had excellent potential but possible obstacles to implementation. Alternative B provided flexibility in the design of a new transit terminal, would be closer to the Embarcadero Station for BART and Muni Metro access, would reduce conflicts between autos and transit, may have some joint development potential, and would be cost effective to build. It may have been feasible to stage Alternative B construction so that the existing Terminal could continue to be used until a new terminal is built. The estimated cost to implement Alternative B was $101 million.

- Alternative A, which sites a new transit terminal at the existing Transbay Transit Terminal with other potential land uses stacked above, had excellent potential but possible obstacles to implementation. Opportunities for joint development on-site would have been maximized. Alternative A would have accommodated transit activities in the same location with a new terminal and would be cost effective to build, but required relocation of transit activities during construction. Implementation of Alternative A was complicated because development of a new transit terminal was intertwined with development of other land uses stacked above. The estimated cost to implement Alternative A was $79 million.

- Alternative X, which modified the existing Terminal, met most future transit service needs but required relocation of Terminal activities during the construction period and cost about the same or more than a new terminal. There was a limited potential for joint development, for private financing, and for enhancement of the surrounding area. The estimated cost to implement Alternative X would be $93 million.

Status: Although conditions in the area have changed due to modifications in the CalTrain proposal and decisions not to proceed with a full rebuild of the Terminal Separator Structure, this study demonstrated that a transit terminal at Main/Mission/Beale and Howard has potential. However, the proposed alternative would not meet the requirements as understood today. The study has less relevance for its findings regarding the existing Terminal site since different alternatives are being pursued.

TRANSBAY TRANSIT TERMINAL BUS DECK INTERIM SEISMIC STRENGTHENING: FINAL EIR

Caltrans
Aug 1994

Relationship to the Transbay Area Plan: Assesses the environmental impacts of strengthening the Transbay Transit Terminal as necessary to maintain its function in the existing facilities.

Summary: The proposed action consists of strengthening the vertical columns of the bus deck by installing 29 structural braces to the existing roofing frame. This solution is common to both the preferred alternative and another alternative that adds column caps to the roof frame. Assessments of impacts were grouped around six criteria: Geology, Air Quality, Transportation and Traffic, Hazardous Materials, Architectural and Historical Resources, and Visual/Aesthetic Considerations. The only impact -- significant or other -- identified for the preferred alternative would be the modification of an historic structure. The Transbay Transit Terminal is considered eligible for the national Register of Historic Places. The "No Project" alternative would have an impact, although not "significant," as a result of exposing people to seismic hazard. The same determination applies to Cumulative Impacts.

Findings: No environmental impact, significant or otherwise, is identified in the preferred alternative except in the modification of an historic structure.

Status: The EIR was certified in August, 1994, as having been completed in compliance with CEQA.

D. CALTRAIN EXTENSION REPORTS & STUDIES

DRAFT PROJECT INTERRELATIONSHIPS WITH SOUTHERN PACIFIC

San Mateo County Transit Development Project
PBTB-Wilbur Smith-Kirker, Chapman
Jan. 1974

Relationship to the Transbay Area Plan: Marginal: issues concerning CalTrain service, primarily south of SFO. Also, since the study focuses on rapid rail extensions of BART service, the maintenance of commuter rail operation on the Bayshore line and the issue of a downtown CalTrain extension is not explored.

Summary: Study of relationship between rapid rail extension south of Daly City through San Mateo County and adjoining SP facilities, particularly concerning segment between SFO and Menlo Park. Freight service operating on the line is seen as an impediment to significant upgrades of the commuter rail service. At the time of the study, ridership on the 44 weekday scheduled trains was about 22,000/day.

The study compares different alternatives for commuter service, varying the extent of rapid rail south from Daly City, and includes survey and route maps and aerial photographs. Much of the criteria in alternatives development is based on SP's continued ownership and operation of the commuter line.

Findings: Many of the conclusions are no longer applicable because of the change in operating structure, and scheduling, fares and technology.

Status: Inactive.

PENTAP TRANSIT ALTERNATIVES PROJECT

DMJM, prepared for MTC
1977

- Description of Initial Alternatives
- Qualitative Analysis of Initial Alternatives
- Description of Final Alternatives
- Draft EIR
- Final Report

Relationship to the Transbay Area Plan: Study to upgrade commuter rail on the Peninsula, including improving service to Transbay Area.

Summary: Seven alternatives reviewed after screening: baseline, bus-dependent, bus/rail, bus/rail with BART - SFO extension, BART/bus, BART/light rail, and BART.

Findings: Maintaining the existing commuter rail (SP at the time) depot at 4th and Townsend was the recommended solution, particularly for its low cost. Better connections to the downtown area would be provided with more intensive bus service.

Status: Superseded.

PENINSULA COMMUTER ON-BOARD SURVEY: APPENDIX, PT 1

Caltrans, Winnie Yates
Apr 1978

Relationship to the Transbay Area Plan: In addressing issue of CalTrain extension into the Transbay Area, the survey results (although dated) provide a profile of ridership characteristics.

Summary: Survey results and accompanying Origin-Destination, census tract and geographic analysis. Ridership on the 44 trains scheduled daily (weekday) at this time was about 16,000/day.

Findings: San Francisco was the destination of 72% of the respondents, and the large majority of these riders were headed to the Financial District. Most comments reflect satisfaction with the train service. The top ten recommended improvements, in descending order of frequency of citation, are adjusting train schedules, improve connections to city bus service, improve train cars, lower fares, improve ticketing service, better advertising, extend train service into downtown San Francisco, improve station cleanliness and facilities, raise fares, and extend service south of San Jose.

Status: Superseded by more recent on-board surveys. Many changes have been implemented in service.

SAN FRANCISCO COMMUTER RAIL STATION RELOCATION STUDY: WORKING PAPER 1

Barton-Aschman Assoc., for Caltrans
April 1982

Relationship to the Transbay Area Plan: Four alternatives studied for the SP commuter rail extension: one "null" alternative, and three that extend commuter rail service and a terminal in the Transbay Area.

Summary: The downtown alternatives include a Rincon Annex terminal, a terminal at 160 Harrison Street, and at the Transbay Terminal. Observations of rail ridership patterns based on terminals in Chicago, Toronto, Philadelphia and San Francisco establish parameters on walking distance, continuity of service, and travel time. Other considerations in the evaluations include right-of-way acquisition issues, probable environmental impacts, engineering problems and construction costs.

Findings: The Harrison site was found to be the least expensive ($65 million in 1982$), the Transbay Terminal the most ($152 million), and the Rincon Annex between ($103 million). The Transbay Terminal site brought the majority of riders closest to their destinations, followed by the Rincon Annex and the Harrison site.

Status: Inactive/outdated. Referenced in Oct. 1984 Engineering Cost Study by Caltrans.

PENINSULA COMMUTE SERVICE SAN FRANCISCO TERMINAL RELOCATION ENGINEERING COST STUDY

Caltrans
October 1984

Relationship to the Transbay Area Plan: All alternatives studied extending the CalTrain service beyond the existing terminal and locating a terminal in the Transbay Area.

Summary: Four alternatives were studied with rights-of-way beneath Third Street, Second Street (one with a station at Second and Market, the other at the Transbay Terminal), and one under King and Main Street and the Embarcadero. Preliminary design and cost studies were made only for the latter alternative, with a subway terminal located beneath the Transbay Terminal.

Findings: The project Cost summary was determined to be $290 million in 1984 dollars. The report emphasizes that "Provision of a convenient uninterrupted ride into downtown San Francisco is the single most important improvement that can be made to stimulate increases in ridership," based on patronage estimates and forecasts.

Status: Cost summaries and alternative analyzed outdated.

CALTRAIN SAN FRANCISCO TERMINAL RELOCATION ENGINEERING COST STUDY

Barton-Ashman Associates, for Caltrans, October 1984

Relationship to the Transbay Area Plan: The study was conducted for a CalTrain terminus in the downtown area immediately to the south of the Transbay Terminal.

Summary: The study is an engineering construction cost study for a terminus to the south of the Transbay Terminal. Several alternative alignments were considered for the tunnel between the existing terminal at Fourth and Townsend and the proposed new terminal.

Findings: Total construction and right of way acquisition cost was estimated to be $290 million in 1984 dollar value.

Status: Completed.

CALTRAIN PASSENGER SURVEY

California Department of Transportation, Crain and Associates and Nelson-Nygaard
October and November, 1989

Relationship to the Transbay Area Plan: The study was conducted to assess Caltrain rider characteristics.

Summary: A detailed station-level origin and destination study of CalTrain riders, including comprehensive information on trip purpose, demographics and attitudes by time periods.

CALTRAIN CORRIDOR AUTOMOBILE COMMUTER SURVEY

Crain & Associates, Inc., for the California Department of Transportation District 4
May 1990

Relationship to the Transbay Area Plan: The study was conducted to assess peninsula commuter characteristics.

Summary: The report studies the reasons why commuters have chosen to drive rather than taking the train, identifies commute problems, and the degree of satisfaction with the train service.

PENINSULA COMMUTE SERVICE ADMINISTRATIVE MANAGEMENT STUDY

Andersen Consulting
May 1990

Relationship to the Transbay Area Plan: Marginal: sets up issues and options for consideration by the JPB as they prepare to assume operation of the CalTrain from Caltrans.

Summary: The report lists various types and structures of organization, and transition strategies.

Findings: N/A

Status: Assumption of responsibility already took place.

PENINSULA COMMUTE SERVICE SAN FRANCISCO DOWNTOWN STATION RELOCATION STUDY
DRAFT EIS/EIR

PBQ&D, for the JPB
August 1991

Relationship to the Transbay Area Plan: The alternatives reviewed in this document all include CalTrain extension into the Transbay Area.

Summary: The three alternatives include a right-of-way under Second Street to the Transbay Terminal, another to Second and Market Street, and one beneath Embarcadero/Main Street.

Findings: Most of the impacts identified are caused by construction: higher noise levels; vibration; restricted traffic, transit and pedestrian access; erosion, temporarily impaired air and visual quality, and encountering hazardous wastes that would require immediate remediation. The only long term impacts would be on land use due to the demolition of some buildings. Positive long term impacts would be increased transit ridership, and diminished traffic congestion and air pollution. While northbound ridership (to Downtown) is projected to nearly double from the "no build" alternative to the three extension alternatives by the year 2005, southbound ridership (to the Peninsula) nearly triples, suggesting that better connections to downtown and its transit network facilitates both the traditional and the reverse commute.

Status: The DEIS/DEIR was not circulated nor certified.

FEASIBILITY STUDY FOR ELECTRIFYING THE CALTRAIN/PCS RAILROAD

Morrison Knudsen Corporation, for Caltrans, California Department of Transportation, October of 1992

Relationship to the Transbay Area Plan: CalTrain extension terminus under both proposed alternatives undergoing environmental analysis are within the Transbay Terminal Area Plan study boundaries. The termini of the two alternatives for CalTrain are also under study for the future Transbay Terminal sites.

Summary: The study is an analysis of technical and economic feasibility of electrifying the commuter rail service between San Francisco and San Jose and the proposed extension to Gilroy.

Findings: The analysis provides the cost effectiveness of electrified CalTrain service at three alternative levels of service and three alternative electrification scenarios(electrification to Gilroy versus the San Jose area). Main issues are : 1) cost of electrification and how it will impact the transportation funding available, and 2) the types of the cars to be used for electrification.

Status: Completed

CALTRAIN PENINSULA COMMUTE SERVICE
SF DOWNTOWN TERMINAL RELOCATION STUDY: THE KIESLING PLAN

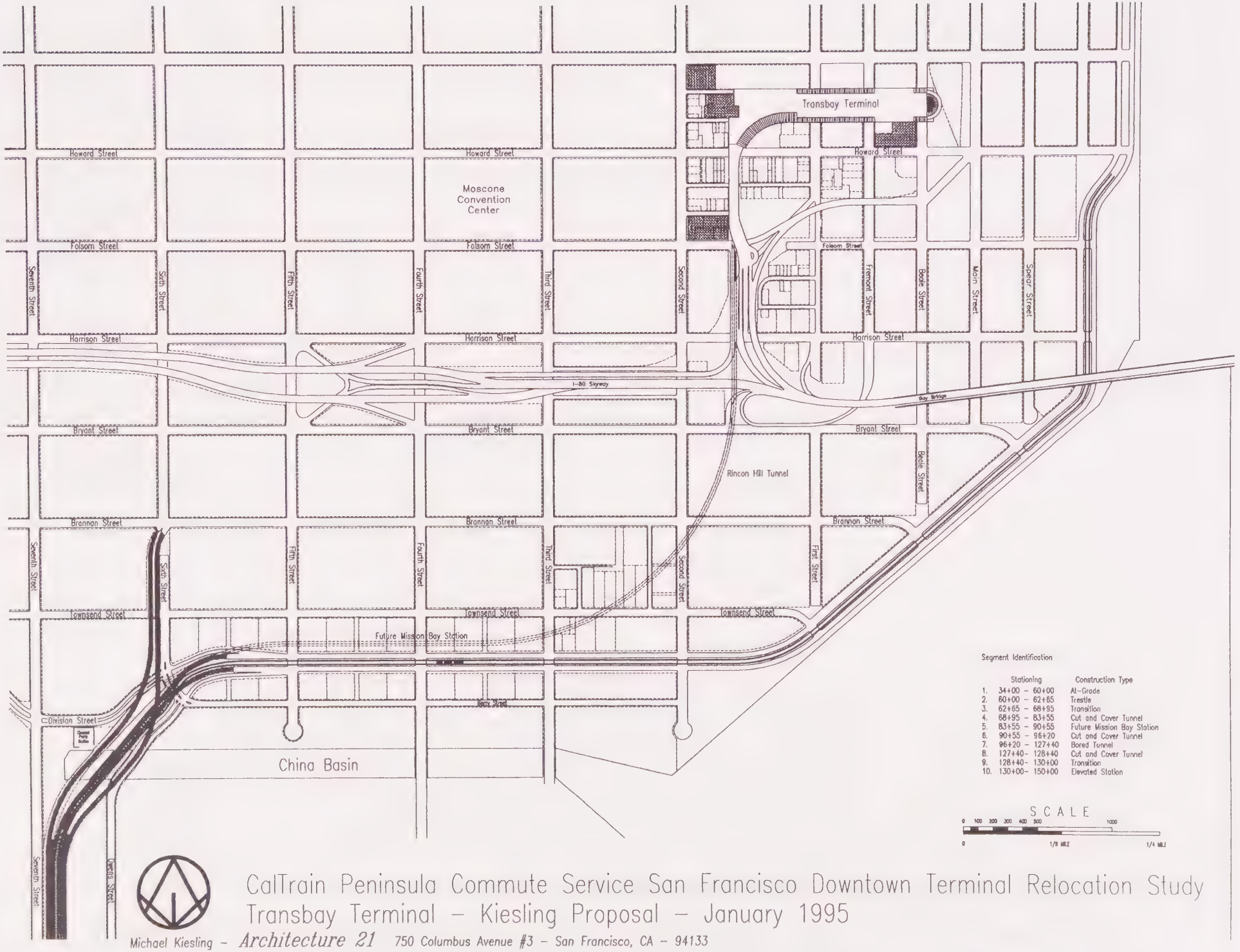
Michael Kiesling
May 1993

Relationship to the Transbay Area Plan: Proposal for a multi-modal transit station/terminal on the site of the existing Transbay Terminal.

Summary: The report details a proposal creating a transit terminal for CalTrain at the site of the existing Transbay Terminal, integrated with transbay bus (or rail) service, high-speed inter-state rail service and Muni streetcar and bus service (see Figures 9a/b/c/d). The CalTrain extension would tunnel under King Boulevard and Rincon Hill between First and Second Streets, emerging from its tunnel in the same right-of-way as the existing western bus ramp. There would be accommodations for storage and turnback, with the possibility of connections to the Bay Bridge for transbay rail service. A matrix comparing this proposal to other downtown CalTrain extension alternatives based on criteria including joint development opportunities, regional bus facilities, interfacings with selected BART/Muni Metro stations, through service potential, Mission Bay ballpark conflicts and relative costs is presented.

Findings: The construction costs of the proposal are (1991) $436 million, the lowest of the relative costs in the matrix evaluation.

Status: The report and findings influenced the Joint Powers Board (JPB) decision to reexamine CalTrain in 1993/94, and the Plan's proposal for use of the Transbay Terminal site will be considered as part of the current JPB planning process.

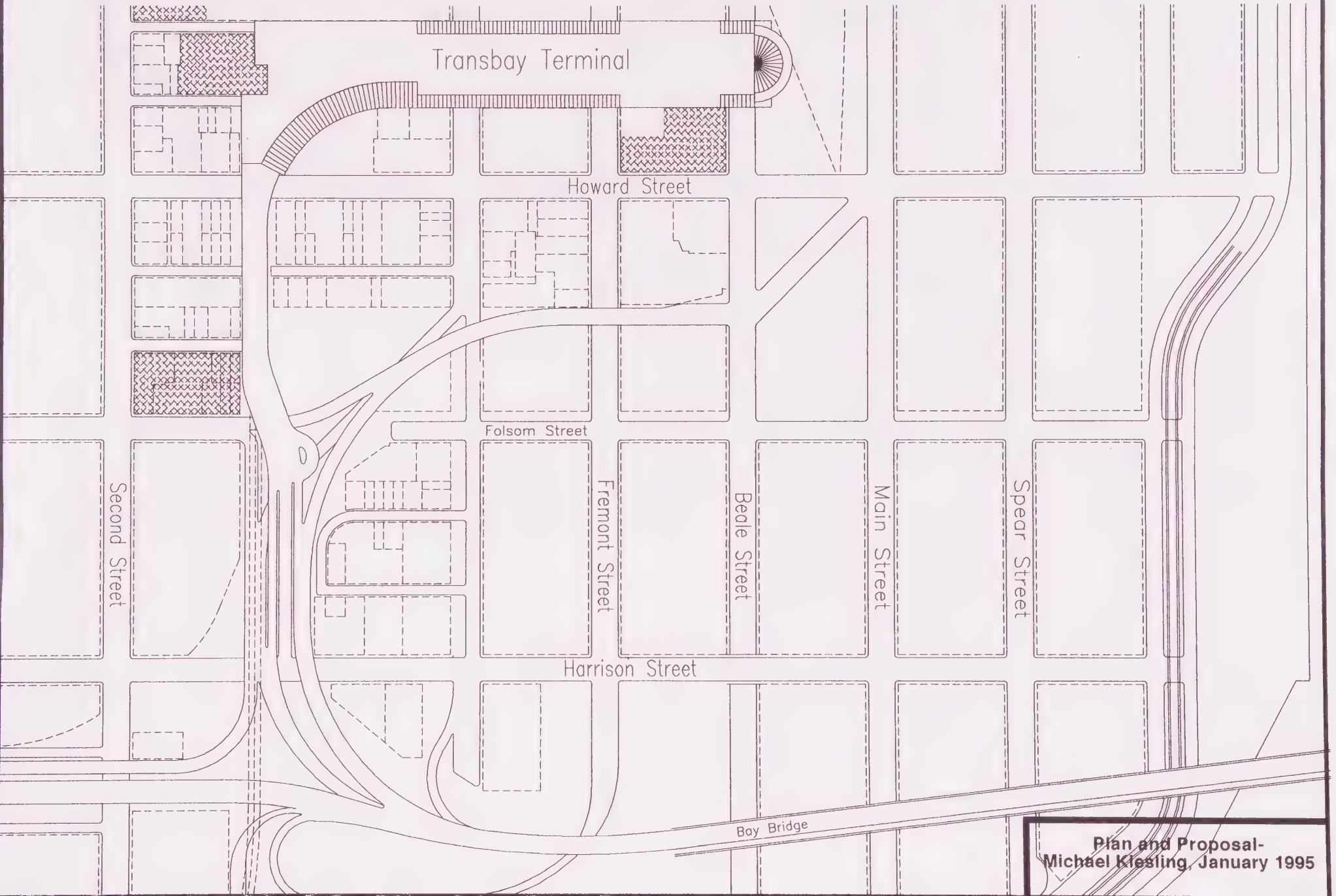


CalTrain Peninsula Commute Service San Francisco Downtown Terminal Relocation Study
Transbay Terminal – Kiesling Proposal – January 1995

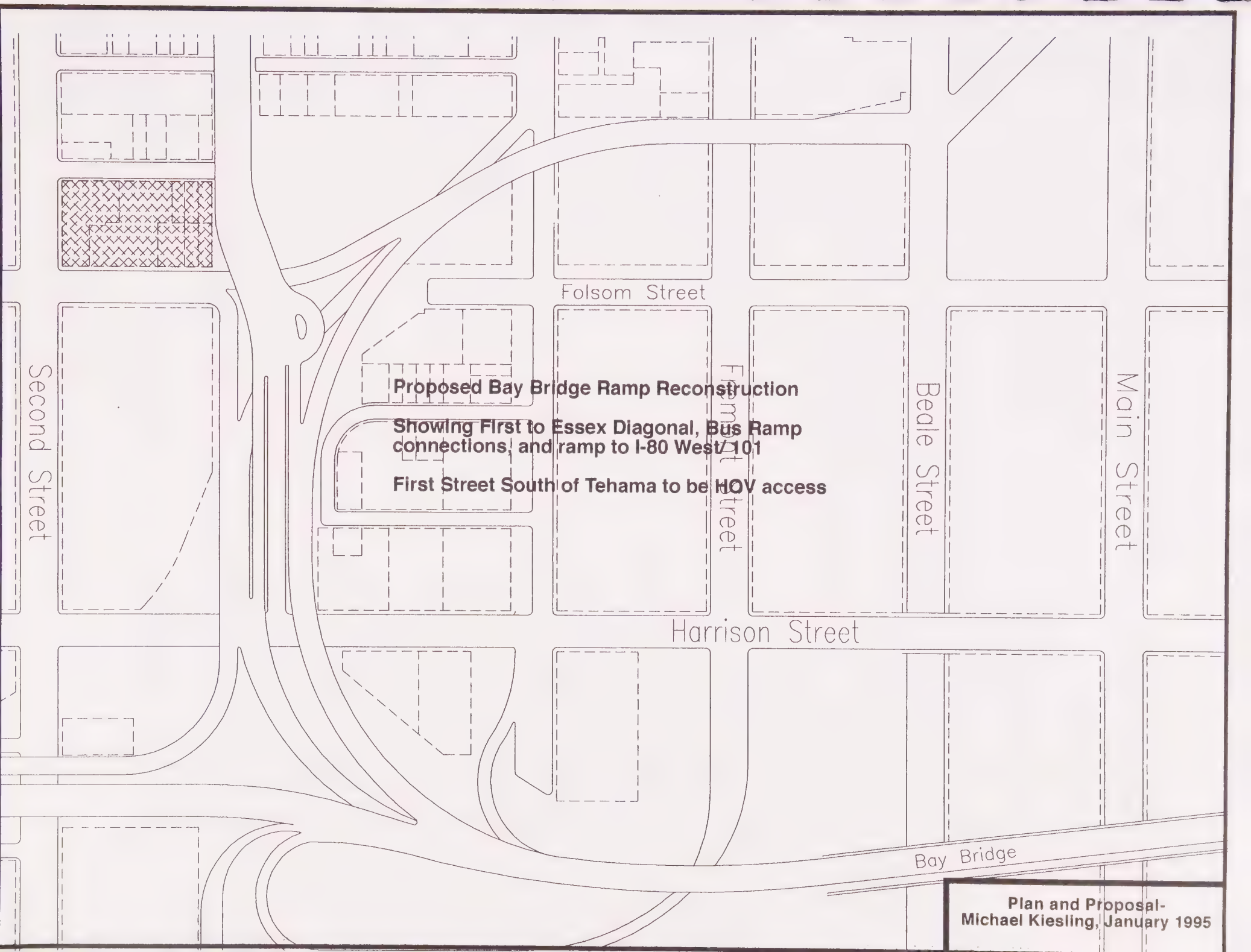
Michael Kiesling – *Architecture 21* 750 Columbus Avenue #3 – San Francisco, CA – 94133

Detail of neighborhood surrounding new Downtown Terminal at site of existing Transbay Transit Terminal

Dased lined along Essex Street represent route of CalTrain's bored tunnel beneath Rincon Hill.



Plan and Proposal-
Michael Kiesling, January 1995

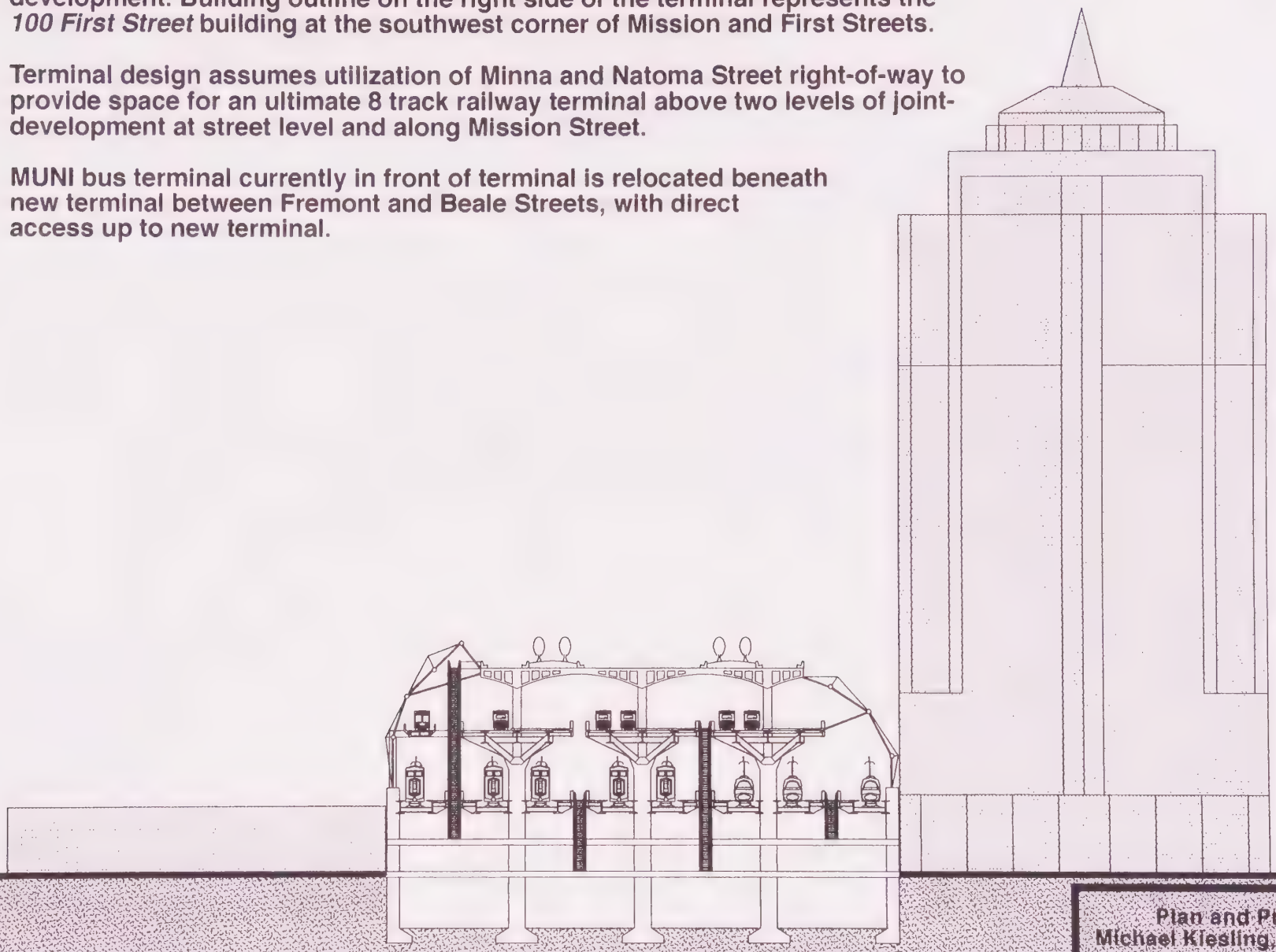

Folsom Street
Second Street
Fremont Street
Beale Street
Main Street
Harrison Street
Bay Bridge
Proposed Bay Bridge Ramp Reconstruction
Showing First to Essex Diagonal, Bus Ramp connections, and ramp to I-80 West/ 101
First Street South of Tehama to be HOV access
Plan and Proposal-
Michael Kiesling, January 1995

Proposed Downtown Terminal at site of Existing Transbay Transit Terminal

Drawing show relationship between terminal and existing neighborhood development. Building outline on the right side of the terminal represents the *100 First Street* building at the southwest corner of Mission and First Streets.

Terminal design assumes utilization of Minna and Natoma Street right-of-way to provide space for an ultimate 8 track railway terminal above two levels of joint-development at street level and along Mission Street.

MUNI bus terminal currently in front of terminal is relocated beneath new terminal between Fremont and Beale Streets, with direct access up to new terminal.



Plan and Proposal-
Michael Kiesling, January 1995

CALTRAIN SAN FRANCISCO DOWNTOWN EXTENSION/SYSTEM UPGRADES: FINAL REPORT

MTC/JPB Joint Study Committee
March, 1994

Relationship to the Transbay Area Plan: 7 of 9 alternatives evaluate proposals to extend CalTrain commuter rail service into the Transbay Area and locate a terminal station there.

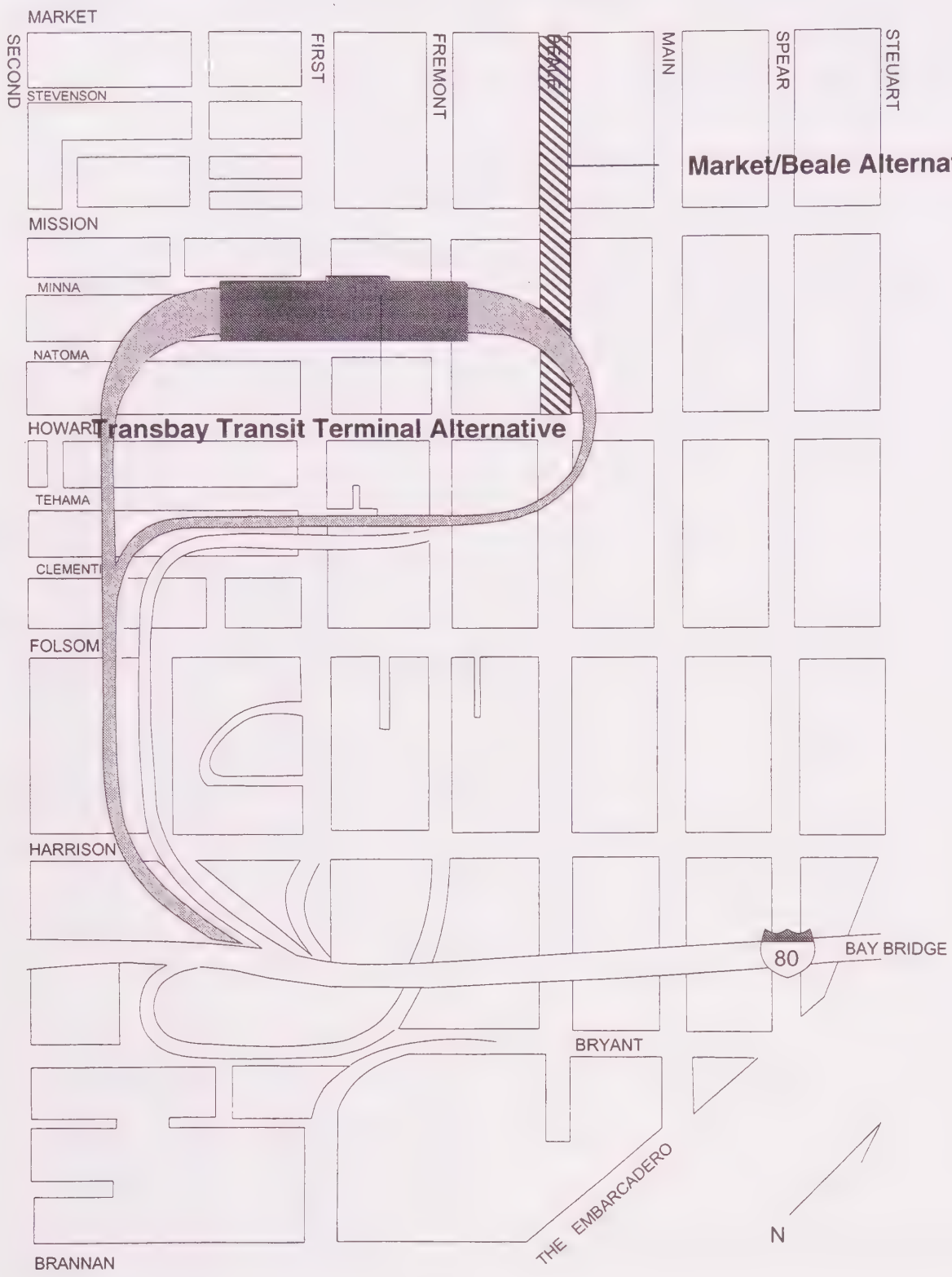
Summary: The project proposes to relocate the San Francisco CalTrain Terminal to a location in the Financial District, in order to provide a terminal station with better access to major downtown activity and employment centers. Nine alternatives are evaluated and costs and related issues are summarized. The nine alternatives include (with cost estimates in 1993$ million in parentheses) 1) a base case with the terminal at 4th and Townsend Streets ($162); 2) extensions to 2nd and Market Streets ($410-602); 3,4) two subway/surface extensions to the Transbay Terminal -- 3) with loop track ($553), 4) stub-ended($539); 5) surface subway behind Transbay Terminal between Main and Beale ($532-725); 6) electric self-propelled surface extensions to 2nd and Market and 7th and Market ($232); 7) light rail to 7th and Market and Beale, Market and Main ($478); 8) surface/subway to Beale, Market and Main ($491-686); and 9) Subway to 7th and Market ($384). The issues identified in this study include where the terminal (and an intercity high-speed rail terminal) should be located and how it should be designed, how much of the extension can operate on surface streets in order to save costs, what system upgrades could improve efficiency, flexibility and reduce operating costs, and whether the improvements are fundable/part of a financially-constrained RTP.

Findings: In 1993, the Metropolitan Transportation Commission (MTC) and the Peninsula Joint Powers Board (JPB) conducted a study to identify fundable alternatives for the CalTrain Downtown Extension that could be included in the *1994 Regional Transportation Plan (RTP).* As a result of this study, in March 1994, the JPB selected Alternative 8B (Beale and Market, electrified) as the Locally Preferred Alternative (LPA), to be advanced into preliminary engineering/environmental analysis and included in the 1994 RTP (see Figure 10). In addition, the JPB directed that preliminary environmental analysis be conducted for Alternative 3B (Transbay Terminal). The alternatives to be evaluated and their costs are included in the following table:

Alternative*	Subway	Subway/Surface
2A. Market/Beale - Diesel	$534.2 million	$490.5 million
2B. Market/Beale - Electrified	$685.9 million	$642.2 million
3. Transbay Bus Deck - Electrified	$583.5 million	$539.0 million

* Alternative 1 is the No Build Alternative (CalTrain Terminal at 4th and Townsend Streets).

Status: MTC considered the recommendations of JPB resulting from this study.



San Francisco Planning Department
Transbay Area Plan and Implementation Program

CALTRAIN ALTERNATIVES

Figure 10
Diagram not to scale

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CALTRAIN MARKET DEMAND SURVEY

Peninsula Corridor Joint Power Board
September 1994

Relationship to the Transbay Area Plan: The terminus of the CalTrain extension under the two alternatives under analysis is planned to end at the two sites being considered for the Transbay Terminal.

Summary: This four phase study analyzes existing conditions within the CalTrain service area to provide basis for modeling efforts to identify future service area. This report summarizes the completed Phases I and II.

Findings:

Phase I, On-Board Passenger Survey, February 1994:

- Approximately 62 percent of the passengers in the northbound direction get off in San Francisco. About 29 percent get on in San Mateo County.
- Approximately 57 percent of the passengers get off in downtown San Francisco.
- Approximately 62 percent of the north-bound passengers get on in Santa Clara County.
- 35 percent of the weekday patrons are newcomers that have been using the train for less than a year.

Phase II, Initial Data Analysis:

- Trend Analysis- a) Ridership in recent years has been static. b) CalTrain's operating cost efficiency has improved despite service level increases. c) Drop in system productivity due to increased service level.
- CalTrain Capacity- a) On weekdays in 1992 CalTrain was being used at 43 percent capacity with an average 57 percent capacity for peak periods. b) In 1993, 15 of the 22 stations with parking were at 90 to 100 percent capacity.
- Demographic and Socioeconomic a) From 1980 to 1990 San Francisco experienced 5.4 percent job growth while San Mateo County and Santa Clara County experienced 22.8 and 22.9 percent job growth consecutively. b) The greatest percentage of job growth in San Mateo occurred around the San Francisco Airport. c) In 1990 Santa Clara County had the greatest number of jobs in the region compared to other counties.
- Land Use- a) High density housing exists in walking distance of some CalTrain stations. b) There are potential development land along the CalTrain rail line.

Status: Phases I and II completed. Phases III (Travel Demand and Ridership Forecasts) and IV (Potential Service Plans) are to be completed in early 1995.

STRATEGIC ANALYSIS REPORT SAR 94-1

San Francisco County Transportation Authority, November 21, 1994

Relationship to the Transbay Area Plan: The report was prepared to brief the Authority on the Transbay Area Study and CalTrain Downtown Terminal Relocation issues.

Summary: The reports identifies sources of funding and possibility of eligibility to qualify for this funding and makes recommendations for the coordination of the two studies.

Findings:

- Proposition B funding cannot be directly used for the Terminal Area Plan. However, pedestrian safety and street improvements projects as a result of the relocation of the terminal site could be funded at the discretion of the Transportation Authority.
- Public funding strategies for the new terminal or an updated existing terminal would need to be developed consistent with the existing priorities established in constrained local and regional transportation funding.
- The Transbay Area Plan and CalTrain Downtown Relocation study need close coordination.
- Impact of these studies on the CMP network needs to be analyzed.
- High speed rail service feasibility needs to be analyzed.

Status: Completed

E. HIGH SPEED RAIL STUDIES

HIGH-SPEED TRAINS FOR CALIFORNIA: STRATEGIC CHOICE; COMPARISON OF TECHNOLOGIES AND CHOICE OF ROUTE. WORKING PAPER 564.

Hall, Leavitt and Vaca, for the Institute of Urban and Regional Development, UC Berkeley
June 1992

Relationship to the Transbay Area Plan: Consideration of High-Speed Rail technology and terminal facilities in the Transbay Area.

Summary: The paper evaluates technologies and route options for high-speed rail in California. It recommends a steel-wheel Very-High-Speed-Train technology, similar to the TGV of France. It also recommends that the mainline route run from Los Angeles to San Francisco (estimated to take around 3 hours), with a fork in the Central Valley that links Sacramento to the mainline, in order to be serve the transportation market competitively. The construction of new rail that accommodates the high-speed trains would be necessary. The right-of-way for the high-speed rail mainline north of San Jose would be along the same right-of-way in which the CalTrain operates, and its upgrade is estimated at $1.3 billion. The cost of the Los Angeles - San Francisco mainline is estimated at $9 billion.

Findings: The paper discusses the constraints of operating high-speed rail on the Peninsula and other urban areas where right-of-way widths (and heights) are limited, noise becomes a problem and cross traffic requires grade separations. Nevertheless, the provision of high-speed rail to downtown San Francisco is considered a necessity to make the service marketable, and the extension of the service into the Transbay Area, where direct connections to BART and Muni Metro are available, is considered important. Specific reference is made to "sharing" the CalTrain extension to the two alternative sites considered by the Joint Powers Board.

Status: Accommodating high-speed rail is one of the criteria in the analysis of alternatives for a Transbay Transit Terminal.

HIGH-SPEED TRAINS FOR CALIFORNIA: DETAILED SEGMENT DESCRIPTIONS, COST ESTIMATES AND TRAVEL TIME CALCULATIONS. WORKING PAPER 565.

Hall, Leavitt and Vaca, for the Institute of Urban and Regional Development, UC Berkeley
June 1992

Relationship to the Transbay Area Plan: Consideration of High-Speed Rail technology and terminal facilities in the Transbay Area.

Summary: The paper details the route, engineering methods and costs of constructing a steel-wheeled high-speed rail system in California, based on the recommendations of Working Paper 564 above.

Findings: Costs, travel time and engineering methods, technology and constraints are the same as in Working Paper 564 above. The specific route described from the vicinity of the existing CalTrain terminal in San Francisco to downtown is the one presented in the *San Francisco Downtown Station Relocation Study Draft EIS*, in which the train enters a tunnel 4 miles north of the Bayshore yard, follows an alignment under Townsend Street, the Embarcadero, and Main Street to a station immediately south of the Transbay Terminal.

Status: Accommodating high-speed rail is one of the criteria in the analysis of alternatives for a Transbay Transit Terminal. The specific route of the CalTrain extension itself is currently being studied in a variety of alignments differing from the one described above.

HIGH SPEED GROUND TRANSPORTATION BRIEFING MATERIAL
State of California Office Memorandum, November 17, 1994

Relationship to the Transbay Area Plan: Policy Paper on High-Speed Ground Transportation (relevant to High Speed Rail technology with terminal facilities in the Transbay Area).

Summary: The paper outlines a 20-year High Speed Ground Transportation Plan that defines a corridor, a finance, operation and maintenance plan, an integration of transportation systems plan and implementation strategies, and outlines that there is relevance to SCR 6 and Proposition 116. Provides a list of the current studies on the subject, identifies the Commissioners serving on the High Speed Ground Transportation Commission.

Findings: N/A

Status: Accommodating high-speed rail is one of the criteria in the analysis of alternatives for a Transbay Transit Terminal.

F. RELATED TRANSPORTATION PROJECTS

Below are brief descriptions of related transportation projects that are currently under way, under study or recently completed within the boundaries or in the vicinity of the Transbay Area Plan. These projects, due to their proximity to the Transbay Area Plan study area, will affect the traffic patterns and transit needs of the study area (see Figure 11).

MUNI METRO TURNBACK

Currently all Muni Metro lines terminate at the Embarcadero Station where switching trains to outbound tracks is slow and causes delays to train schedules. After completion of the new underground tunnel Muni Metro Turnback (MMT) a double trackway, switches and underground storage of Muni Metro cars east of the Embarcadero Station will be provided. All of this will allow faster turnback of Muni Metro trains and increased capacity from 20 trains to 30 trains per hour during the morning and afternoon peak hour. MMT will extend from the existing Embarcadero station to the east and south along The Embarcadero roadway to the south of Market Street. This project is currently under construction and is expected to be completed in fall of 1996.

MUNI METRO EXTENSION

Muni Metro Extension (MMX) is proceeding along with the MMT project. MMX will extend Metro service from the Embarcadero Station through the MMT to the south along the Southern Embarcadero Boulevard and west along King Street to 6th Street. The MMX would eventually extend to a terminus in Mission Bay Development. The MMX will provide direct improved service between the City's neighborhoods, the Downtown area and the neighborhoods undergoing substantial new development: Rincon Hill, South Beach and Mission Bay in the future.

The subway tracks for MMX will surface along the South Embarcadero between Howard and Folsom Streets through a portal currently under construction. The sections along The Embarcadero between Folsom and King Streets and along King to Third Street have been completed. The section between The Embarcadero Station and Folsom Street on Embarcadero will be completed in fall 1996 with the MMT project. The Section between Third and Sixth Street is expected to be completed after the demolition of the stub-end I-280 Freeway and construction of new ramps to this freeway.

F - LINE

The new F-Line streetcar will run from the Upper Market neighborhoods to the foot of Market Street, and then along the waterfront on Embarcadero to Fisherman's Wharf. The F-Line will be a surface historic streetcar operation. This new line will ease congestion in the Muni Metro

below Market Street, will connect the retail district along Market Street and Union Square area, the YBC Convention Center as well as the financial district to Fisherman's Wharf. The F-Line will also provide a better transit access along the Embarcadero.

Different phases of this project are either completed or are underway. F-line service on Market Street between Castro and Fremont Street is expected to start operation in 1995. There will be an interim F-Line terminal at the Transbay Transit Terminal until the waterfront service can be established. Construction of the last section of the project, located in the Mid-Embarcadero section, will begin following the decision regarding the roadway alignment. The full operation of the F-Line is expected to start in 1999.

SOUTHERN AND NORTHERN EMBARCADERO SURFACE ROADWAY PROJECTS

The Southern Embarcadero Roadway project was completed in summer of 1994. It covered the section of the Embarcadero between Folsom and King Street and King Street between Embarcadero and Third Street. The roadway project created a boulevard with two traffic lanes in both directions, turning pockets, and a continuous twenty-five foot pedestrian promenade along the waterfront with rail transit running at the median for MMX.

The Northern Embarcadero Roadway project covers the section of the Embarcadero between Broadway and North Point. It is currently under construction and is expected to be completed in 1995. Similar to the South Embarcadero project, this roadway will be a boulevard with two traffic lanes in each direction with rail tracks running in the median for Muni F-Line.

TSS / MID-EMBARCADERO PROJECT

The Terminal Separator Structure (TSS) replacement and the Mid-Embarcadero roadway projects are currently undergoing environmental review. The proposal is to construct a new roadway, freeway ramps, and associated street improvements in place of the elevated Embarcadero Freeway and ramp connection known as the Terminal Separator Structure, both demolished following the damage sustained during the Loma Prieta Earthquake in October 1989.

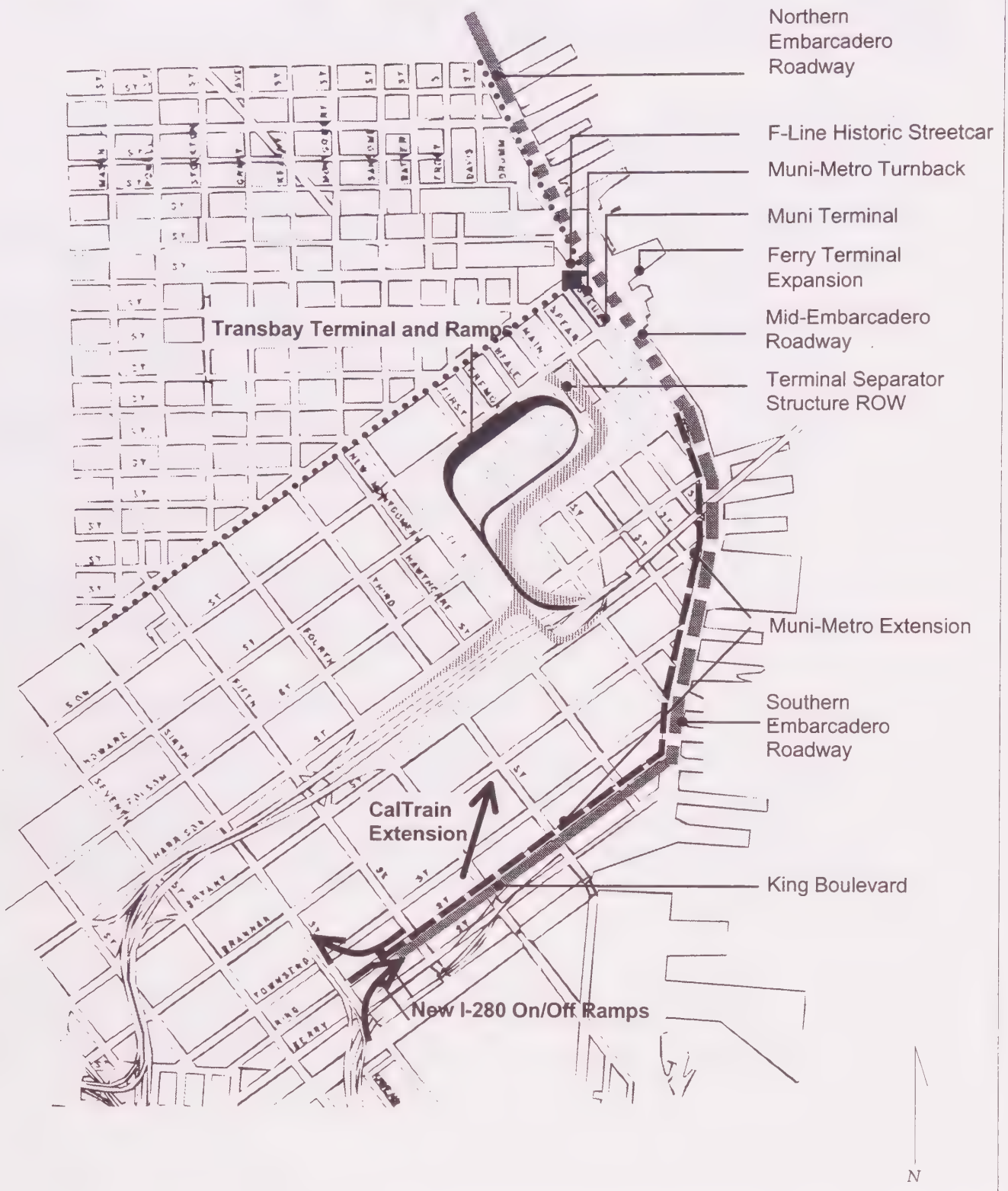
The roadway project covers the Mid-Embarcadero area, between Broadway and Folsom Street. Prior to the earthquake, an elevated freeway running on this section of The Embarcadero provided connection between the Bay Bridge, I-80 and US 101 and the northeast quadrant of the City. The project also involves the replacement of the ramp structure connecting the elevated freeway and the mainline freeway known as the Terminal Separator Structure.

Four build project alternatives and one No-Build alternative are being considered for the roadway and replacement projects. The following describes the main features of the build alternatives:

- All build alternatives will generally have two traffic lanes plus parking in each direction, left turn lanes, rail transit running at the median and a wide waterfront pedestrian promenade.
- There would be no elevated freeway along The Embarcadero Roadway.
- The Terminal Separator Structure would not be rebuilt and there would be no direct elevated ramp connection between the freeway and the Embarcadero roadway.
- There would be no new ramps to the Bay Bridge. Some of the alternatives shift the p.m. peak HOV ramp, Sterling Street on-ramp and Essex Street on-ramp. Some of the alternatives propose to flare up the Fremont Street off-ramp to exit onto Folsom Street as well as Fremont Street.
- Some of the alternatives propose a set of on/off-ramp to US 101 South and I-80 East. The on-ramp would be on Harrison between Essex and Second Street and the off-ramp would be on Second or Fourth Street.
- All of the build alternatives propose a series of traffic improvement measures.

The first Draft of the EIR/EIS is scheduled to be published in summer 1995. Selection of the preferred alternative would be made by the Board of Supervisors. Completion of the project is expected to occur in 1999. The Mid-Embarcadero project would complete The Embarcadero roadway project running from King to North Point Streets.

Muni has plans to expand its bus terminal facility at Mission and Steuart Streets to meet future operational needs in terms of number and size of the buses. The planned expansion would occupy portions of the existing Embarcadero roadway. The proposed build alternatives under the TSS/Mid-Embarcadero project would accommodate this expansion. The Transbay Terminal Area Plan study is considering potential relocation of the Muni bus terminal function and combining its function with other Muni operation functions already located at the Transbay Terminal. The recommendation of this study will complement the TSS/Mid-Embarcadero project.



San Francisco Planning Department
Transbay Area Plan and Implementation Program

RELATED TRANSPORTATION PROJECTS

Figure 11

Diagram not to scale

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FERRY SERVICE EXPANSION

This project involves improvements required for the berthing of vessels within the Ferry Building area and associated landside improvements to serve and enhance the use of this area as a point of embarkation associated with ferry service increase. The project would generally involve:

- Construction of a new north terminal promenade along the Ferry Building's eastern edge.
- Provision of new floating landing facility.
- Construction of a new dock south of the Ferry Plaza.
- Sidewalk improvements.
- Dredging of Bay mud.

This project is currently undergoing environmental review and is the environmental review is expected to be completed this year.

BART-SAN FRANCISCO AIRPORT EXTENSION

Draft Environmental Impact Report/ Supplemental Draft Environmental Impact Statement, BART, SamTrans, US Department of Transportation, January 1995

Relationship to the Transbay Area Plan: BART's Embarcadero Station is in close proximity to the existing the proposed terminal site. BART extension to the airport will provide better access from the airport to the Terminal which provides regional access and is likely to increase ridership at TTT.

Summary: Four build alternatives, one no-build scenario and one transportation systems management alternative are undergoing environmental review. All build alternatives extend BART from the Daly City Station to the City of Milbrae . The major difference between the build alternatives are: 1) direct connection to the airport versus a connection through a light rail system from a station to the east or west of Highway 101; 2) various alignment configurations through the City of San Bruno; 3) crossing over Highway 101 through an underground tunnel or an elevated structure for alternatives with BART terminal east of US 101; and 4) cost differences between alternatives which range from $ 876 million to 1,269 million.

Findings: N/A

Status: Draft Environmental Impact Report and Supplemental Draft Environmental Impact Statement has been published in January of 1995.

SAN FRANCISCO BAY CROSSING STUDY

Korve Engineering, Inc, for Metropolitan Transportation Commission, March 1991

Relationship to the Transbay Area Plan: Impact on the ridership and transit service to the Transbay Transit Terminal.

Summary: This study examined methods to increase the capacity and mobility options for transbay travel between San Francisco/the Peninsula and the East Bay. The five build alternatives developed are: 1) a vehicular bridge also carrying BART connecting I-380 and San Francisco International Airport in the Peninsula to I-238 and the new Dublin-Pleasanton Line in the East Bay, 2) a new BART tube parallel to existing tube connecting San Francisco and Oakland, 3) a heavy rail tunnel connecting Oakland to San Francisco, 4) expanded high-speed ferry system, and 5) a new BART tube connection between the San Francisco International Airport and Oakland International Airport.

Findings: N/A

Status: completed

1994 REGIONAL TRANSPORTATION PLAN FOR THE SAN FRANCISCO BAY AREA and APPENDICES

MTC

Relationship to the Transbay Area Plan: This Plan is the financing and priority implementation tool for transportation projects in the nine-county Bay Area. Existing and proposed transportation facilities such as the Transbay Transit Terminal, the Embarcadero Roadway and the CalTrain Extension are all subject to this Plan.

Summary: The plan proposes funding for arterials and streets in the MTS network, including those in the Transbay Area.

Findings: The RTP identifies funding for BART and Muni capital shortfall funding, bicycle and pedestrian improvements, and the CalTrain Extension ($216.8 million identified Track 1 funding for preferred alternative) into the Transbay Area. The Transbay Terminal is not identified for funding in the 1994 RTP.

Status: This plan is updated every 2 years.

SAN FRANCISCO LONG RANGE FIXED GUIDEWAY PLAN
Description of Screened Alternatives
Ridership Analysis for Screened Alternatives
Preliminary Capital Cost Estimate for Screened Alternatives
SF County Transportation Authority
September-November 1994

Relationship to the Transbay Area Plan: The Fixed Guideway Plan, which addresses four corridors (Bayshore, Geary, North Beach and Van Ness) in San Francisco, examines improvements and upgrades of transit service, light or heavy rail and electric trolley service on the corridors. Some of the current transit services in these corridors terminate at the Transbay Terminal, such as the 38 Geary. The Geary Rail Study surface light rail will be subject to further study with the Transbay Terminal as the terminus.

Summary: Proposed improvements include direct connections to the present Transbay Terminal, on a Market Street alignment, or crossing Market Street nearby (of special interest is a subway alignment under Third and Kearny).

Findings: N/A

Status: Studies of the corridors are on-going. The Bayshore and Geary Corridors are higher priority, and the Bayshore Corridor improvements (light rail) are earmarked for implementation funds. The Van Ness corridor studies are funded for preliminary planning considerations only.

TRANSPORTATION ELEMENT OF THE SAN FRANCISCO MASTER PLAN
DRAFT FOR CITIZEN'S REVIEW
SF Planning Department
November 1994

Relationship to the Transbay Area Plan: All transportation issues and policies in the city are relevant to the Transportation Element.

Summary: The following policies are particularly relevant to the subject of transportation in the Transbay Area:

<u>GENERAL</u>
Objective 1: Meet the needs of all residents and visitors for safe, convenient and inexpensive travel within San Francisco and between the city and other parts of the region while maintaining the high quality living environment of the Bay Area.

Policy 1: Involve citizens in planning and developing transportation facilities and services, and in further defining objectives and policies as they relate to district plans and specific projects.

Policy 2: Give priority to public transit and other alternatives to the private automobile as the means of meeting San Francisco's transportation needs, particularly those of commuters.
Policy 3: Increase the capacity of transit during the off-peak hours.
Policy 4: Coordinate regional and local transportation systems and provide for interline transit transfers.
Policy 6: Assure expanded mobility for the disadvantaged.

Objective 2: Use the transportation system as a means for guiding development and improving the environment.

Policy 1: Use rapid transit and other transportation improvements in the city and region as the catalyst for desirable development, and coordinate new facilities with public and private development.
Policy 2: Reduce pollution and noise.
Policy 3: Design and locate facilities to preserve the historic city fabric, the natural landscape and to protect views.
Policy 4: Organize the transportation system to reinforce community identity, improve linkages among interrelated activities and provide focus for community activities.
Policy 5: Provide incentives for the use of transit, carpools, vanpools, walking and bicycling and reduce the need for new or expanded automobile and automobile parking facilities.

REGIONAL

Objective 2: Maintain and enhance San Francisco's position as the hub of a regional, city-centered transit system.

Policy 1: Rapid transit lines from all outlying suburban corridors should lead to stations and terminals that are adjacent or connected to each other in the downtown hub of San Francisco.
Policy 2: Increase transit ridership capacity in all congested regional corridors.
Policy 3: Where significant transit service is provided, bridges and freeways should have priority transit treatment, such as exclusive transit lanes.
Policy 4: Integrate future rail transit extensions to, from, and within the city as technology permits so that they are compatible with and immediately accessible to existing BART, CalTrain or Muni rail lines.
Policy 6: Facilitate transfers between different transit modes and services by establishing simplified and coordinated fares and schedules, and by employing design and technology features to make transferring more convenient.
Policy 7: Locate outlying rapid transit stations close to the commercial and high-density residential districts and employment centers of each suburban community.
Policy 8: Expand and coordinate the use of ferries, water taxis and other forms of water-based transportation with each other and with landside transportation in waterfront communities in San Francisco and across the bay, using San Francisco's Ferry Building as the main transfer point.

Objective 3: Support and enhance the role of San Francisco as a major destination and departure point for travelers making interstate, national and international trips.

Policy 3: Encourage the development of a high-speed water transit system from the Airport to the Ferry Building and to Oakland Airport to improve the efficiency and flexibility of the Airport's role in accommodating large numbers of domestic and international air passengers.

Policy 5: Develop high-speed rail that links downtown San Francisco directly to all major interstate and national passenger rail corridors as the principle alternative to interstate air travel, and as the primary means to relieve air traffic congestion

Objective 5: Develop a parking strategy that encourages short-term parking at the periphery of downtown and long-term intercept parking at the periphery of the urbanized Bay Area to meet the needs of long-distance commuters traveling by automobile to San Francisco or nearby destinations.

Policy 1: Reserve a majority of the off-street parking spaces at the periphery of downtown for short-term parking.

Objective 7: Improve bicycle access to San Francisco from all outlying corridors.

Policy 1: Allow bicycles on regional transit vehicles such as trains and ferries whenever practical.

CONGESTION MANAGEMENT

Objective 2: Maintain public transit as the primary mode of transportation in San Francisco and as a means through which to guide future development and improve regional mobility and air quality.

Policy 2: Continue to favor investment in transit infrastructure and services over investment in highway development and other facilities that accommodate the automobile.

Policy 3: Encourage development that efficiently coordinates land use with transit service, requiring that developers address transit concerns, including bicycle and pedestrian access to transit facilities, as well as mitigate traffic problems.

Policy 4: Encourage the development of one or more multi-service transportation outlets for the sale of transit fare instruments and the provision of other kinds of trip information.

VEHICLE CIRCULATION

Objective 1: Establish a street hierarchy system in which the function and design of each street are consistent with the character and use of adjacent land.

Policy 2: Design streets for a level of traffic that serves, but will not cause a detrimental impact on adjacent land uses.

Objective 2: Provide for convenient and safe movement among districts in the city during off-peak travel periods.

Policy 2: Promote increased traffic safety, with special attention to hazards that could cause personal injury.

MASS TRANSIT

Objective 1: Give first priority to improving transit service throughout the city, providing a convenient and efficient system as a preferable alternative to automobile use.

Policy 3: Develop transit centers according to established guidelines.

Policy 6: Encourage ridership and clarify transit routes by means of a city-wide plan for street landscaping, lighting and transit preferential treatments.

Policy 7: Intensify overall transit service in the "central area."

Policy 8: Improve inter-district and intra-district transit service.

Policy 10: Promote the electrification of bus operation.

Objective 2: Develop transit as the primary mode of travel to and from downtown and all major activity centers within the region.

Policy 1: Provide transit service from residential areas to major employment centers outside the downtown area.

Policy 2: Where a high level of transit ridership or potential ridership exists along a corridor, existing transit service or technology should be upgraded to attract and accommodate riders.

Policy 3: Make future rail transit extensions in the city compatible with existing BART, CalTrain or Muni rail lines.

Policy 4: Facilitate and continue ferries and other forms of water-based transportation as an alternative mode of transit between San Francisco and other communities along the Bay, and between points along the waterfront within San Francisco.

Policy 5: Establish frequent and convenient transit service, including water-based transit, to major recreational facilities and provide special service for sports, cultural and other heavily attended events.

Policy 6: Make convenient transfers between transit lines, systems and modes possible by establishing common or closely located terminals for local and regional transit systems and by coordinating fares and schedules.

Policy 7: Bridges and freeways should have exclusive transit lanes where significant transit service is provided by transit.

Policy 8: Improve pedestrian and bicycle access to transit facilities.

Objective 3: Develop and improve demand-responsive transit systems as a supplement to regular transit services.

Policy 3: Guarantee complete and comprehensive transit service and facilities that are accessible to all riders, including those with mobility impairments.

PEDESTRIAN

Objective 1: Improve the city's pedestrian circulation system to provide for efficient, pleasant, and safe movement.

Policy 1: Provide sufficient pedestrian movement space with a minimum of pedestrian congestion in accordance with a pedestrian street classification system.

Policy 2: Widen sidewalks where intensive commercial, recreational, or institutional activity is present and where residential densities are high.

Policy 5: Minimize obstructions to through pedestrian movement on sidewalks by maintaining an unobstructed width that allows for passage of people, strollers and wheelchairs.

Policy 6: Ensure convenient and safe pedestrian crossings.

Policy 7: Support pedestrian needs by incorporating them into regular short-range and long-range planning activities for all city and regional agencies and include pedestrian facility funding in all appropriate funding requests.

Policy 8: Implement the provisions of the Americans with Disabilities Act and the city's curb ramp program to improve pedestrian access for all people.

Objective 2: Improve the ambience of the pedestrian environment.

Policy 1: Preserve existing historic features such as streetlights and encourage the incorporation of such historic elements in all future streetscape projects.

Policy 2: Maintain and expand the planting of street trees.

Policy 4: Preserve pedestrian-oriented building frontages.

Objective 4: Consider the sidewalk area as an important element in the citywide open space system.

Policy 1: Retain streets and alleys not required for traffic, or portions thereof, for through pedestrian circulation and open space use.

Policy 2: Partially or wholly close certain streets not required as traffic carriers for pedestrian use or open space.

Policy 3: Encourage pedestrian serving uses on the sidewalk.

BICYCLES

Objective 1: Ensure that bicycles can be used safely and conveniently as a primary means of transportation, as well as for recreational purposes.

Policy 4: Make available bicycle route and commuter information and encourage increased use of bicycle transportation.

Policy 5: Accommodate bicycles on regional transit facilities and important regional transportation links.

Policy 6: Include bicycle facility funding in all appropriate requests.

Objective 2: Provide secure and convenient parking facilities for bicycles.

Policy 1: Provide secure bicycle parking in new governmental, commercial, and residential developments.

Policy 2: Provide secure bicycle parking at existing city buildings and facilities and encourage it in existing commercial and residential buildings.

Policy 3: Provide parking facilities which are safe, secure, and convenient.

Policy 4: Provide bicycle parking at all transit terminals.

Objective 3: City government should play a leadership role in increasing bicycle use.

Policy 1: Consider the needs of bicycling and the improvement of bicycle accommodations in all city decisions and improve accommodation as much as possible.

CITYWIDE PARKING

Objective 1: Ensure that the provision of new or enlarged parking facilities does not adversely affect the livability and desirability of the city and its various neighborhoods.

Policy 1: Assure that new or enlarged parking facilities meet need, locational and design criteria.

Policy 2: Discourage the proliferation of surface parking as an interim land use, particularly where sound residential, commercial or industrial buildings would be demolished pending other development.

Policy 3: Maximize the efficient use of land devoted to parking by consolidating adjacent surface lots and garages into a parking structure, possibly containing residential, commercial or other uses.

Policy 4: Restrict long term automobile parking at rapid transit stations in the city in favor of development of effective feeder ~~bus~~ transit service.

Policy 5: In any large development, allocate a portion of the provided off-street parking spaces for compact automobiles, vanpools, bicycles and motorcycles commensurate with standards that are, at a minimum, representative of their proportion of the city's vehicle population.

Policy 6: Make existing and new accessory parking available to nearby residents and the general public for use as short-term or evening parking when not being utilized by the business or institution to which it is accessory.

Objective 2: Establish parking rates and off-street parking fare structures to reflect the full costs, monetary and environmental, of parking in the city.

Policy 1: Set rates to encourage short-term over long term automobile parking.

Policy 2: Where off-street parking near institutions and in commercial areas outside downtown is in short supply, set parking rates to encourage higher turnover and more efficient use of the parking supply.

Policy 3: Encourage equity between drivers and non-drivers by offering transit fare validations and/or cash-out parking programs where off-street parking is validated or subsidized.

Objective 3: Limit parking in downtown to help ensure that the number of auto trips to and from downtown will not be detrimental to the growth or amenity of downtown.

Policy 1: Discourage new long-term commuter parking spaces in and around downtown. Limit the long-term parking spaces to the number that already exists.

Policy 2: Locate any new long-term parking structures in the areas peripheral to downtown. Any new peripheral parking structures should be concentrated to make transit service convenient and efficient, connected to transit shuttle service to downtown, and provide preferred space and rates for van and car pool vehicles, bicycles and motorcycles.

Policy 3: Encourage short-term use of existing parking spaces within and adjacent to downtown by converting all-day commuter parking to short-term parking in areas of high demand.

Policy 4: Where residential streets that are adjacent to or within the downtown area are used for on-street, long-term commuter parking, implement preferential parking programs for

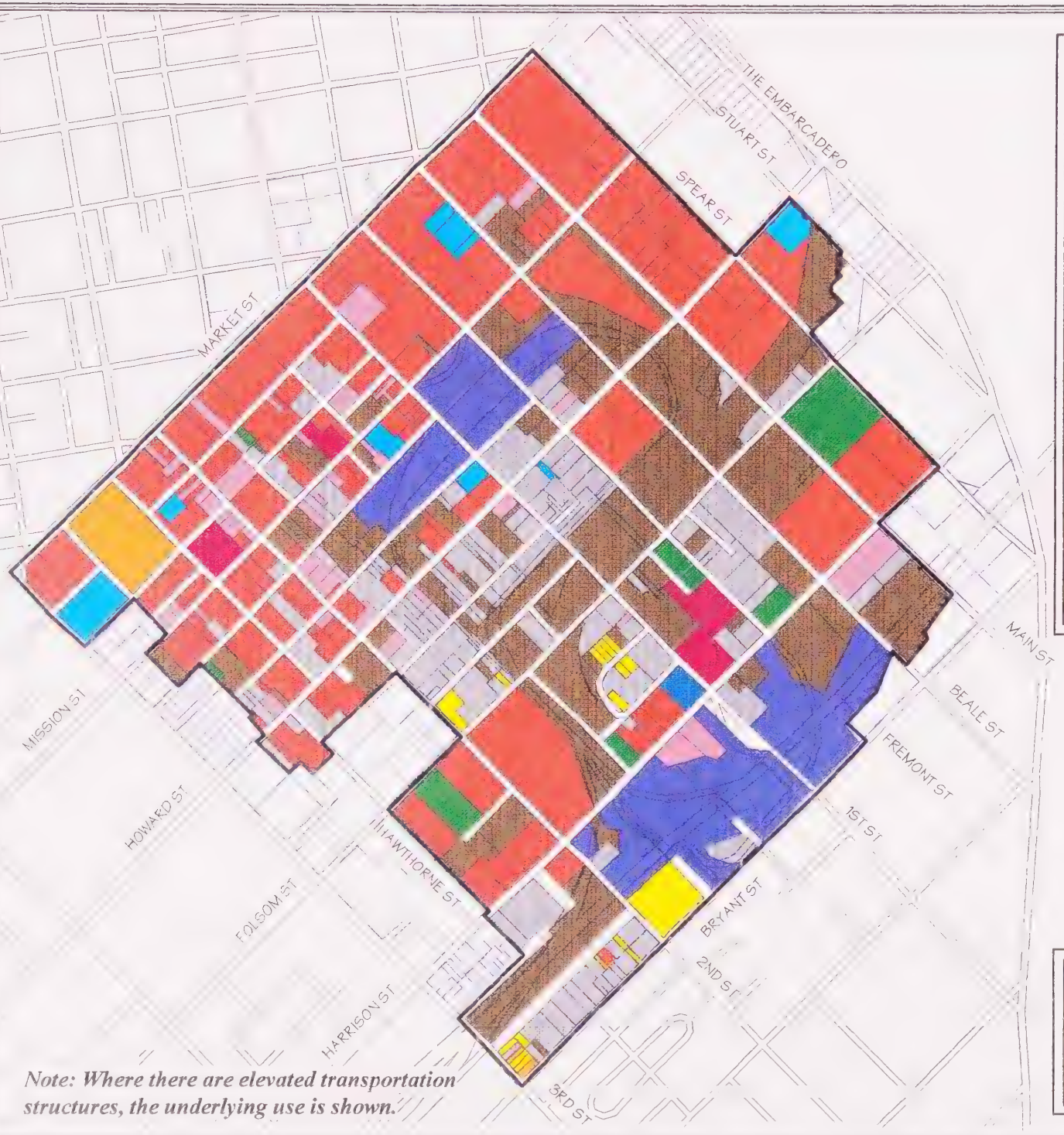
residents and other measures to promote short-term parking and discourage long-term commuter parking.

Policy 5: When the priority functions of service vehicle access and pedestrian movement are sufficiently accommodated on downtown alleys, short-term parking especially designated for motorcycles should be provided.

Findings: N/A

Status: This draft Element is proposed for adoption in 1995.

II. Land Use



LAND USE by PARCEL

LEGEND

- Commercial Garage
- Hotel
- Industrial
- Institutional
- Office
- Public
- Parking Lot / Vacant
- Retail
- Residential
- Gas Station
- Transportation

Note: Where there are elevated transportation structures, the underlying use is shown.

Figure 12

N

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995
Scale: 1" = 1/8 mile (approx.)

A. EXISTING LAND USE

1. *Study Area*

The Transbay Transit Terminal (TTT) and its bus access ramps occupy a central location within downtown San Francisco. The financial district extends to the north and east, with the waterfront beyond. Moscone Center, and Yerba Buena Center, are immediately adjacent west of the study area, and the region's premier retail district, Union Square, is to the northwest. The changing South of Market, Rincon Hill/South Beach, and Mission Bay districts are to the south. The Terminal area is a central node that demarcates a transitional zone between the high density office area and the districts to the south which are more industrial and mixed in character (see Figure12).

The reconfiguration of the Terminal Separator Structure and the removal of the Embarcadero Freeway have provided additional vacant land with great potential for accommodating transportation functions and development around the Transbay Transit Terminal. In order to assess the new land use and transportation opportunities, the area bounded roughly by The Embarcadero, Market Street, Third Street, and Bryant Street has been designated a redevelopment survey area and is the focus of this background report and analysis.

The northern and eastern portion of the survey area is the most intensely developed. It is occupied by high rise office buildings with some ground floor retail along Market Street, and smaller and older office buildings along Mission Street. The area closest to the waterfront is built out, with the exception of the parcels that have been vacated by the demolition of The Embarcadero Freeway. This area, from Steuart to Main Streets, between Mission and Folsom Streets, is characterized by office and mixed use development from the 1970's-1990's in high rise buildings with commercial retail at ground level such as Rincon Center.

The Transbay Transit Terminal is located between Mission, First, Natoma, and Fremont Streets with ramps that sweep east and westward from the Terminal itself to form a loop connecting to the Bay Bridge. The area immediately adjacent to and south of the Transbay Transit Terminal is characterized by mixed use lower buildings and surface parking lots. Office buildings with ground floor retail predominate along major streets, such as Mission, Howard, and Second Streets while industrial uses tend to front along the alley streets such as Natoma, Tehama, and Clementina Streets. Parcels north of Folsom Street and east of Essex Street were vacated with the removal of the Terminal Separator Structure. The blocks between Main, Beale, Folsom, and Mission Streets were vacated by the demolition of the Terminal Separator Structure with the exception of the building at 301 Mission Street, and some buildings on Folsom Street.

The Rincon Hill area, south of the Terminal Separator Structure, is characterized by a mixture of uses and many vacant parcels. The area bounded by Fremont, Folsom, Harrison and the former Terminal Separator Structure is characterized by mixed use buildings generally not higher than four stories. These buildings include office, industrial, institutional, and residential uses. The

LAND OWNERSHIP by PARCEL

LEGEND

- CalTrans
- Fritzi Realty Corp.
- KSW Properties
- P. G. & E.
- Bechtel Investments
- Delta Dental
- Pacific Telephone
- Other Public Agencies
- Small Ownership (<=3 Parcels)

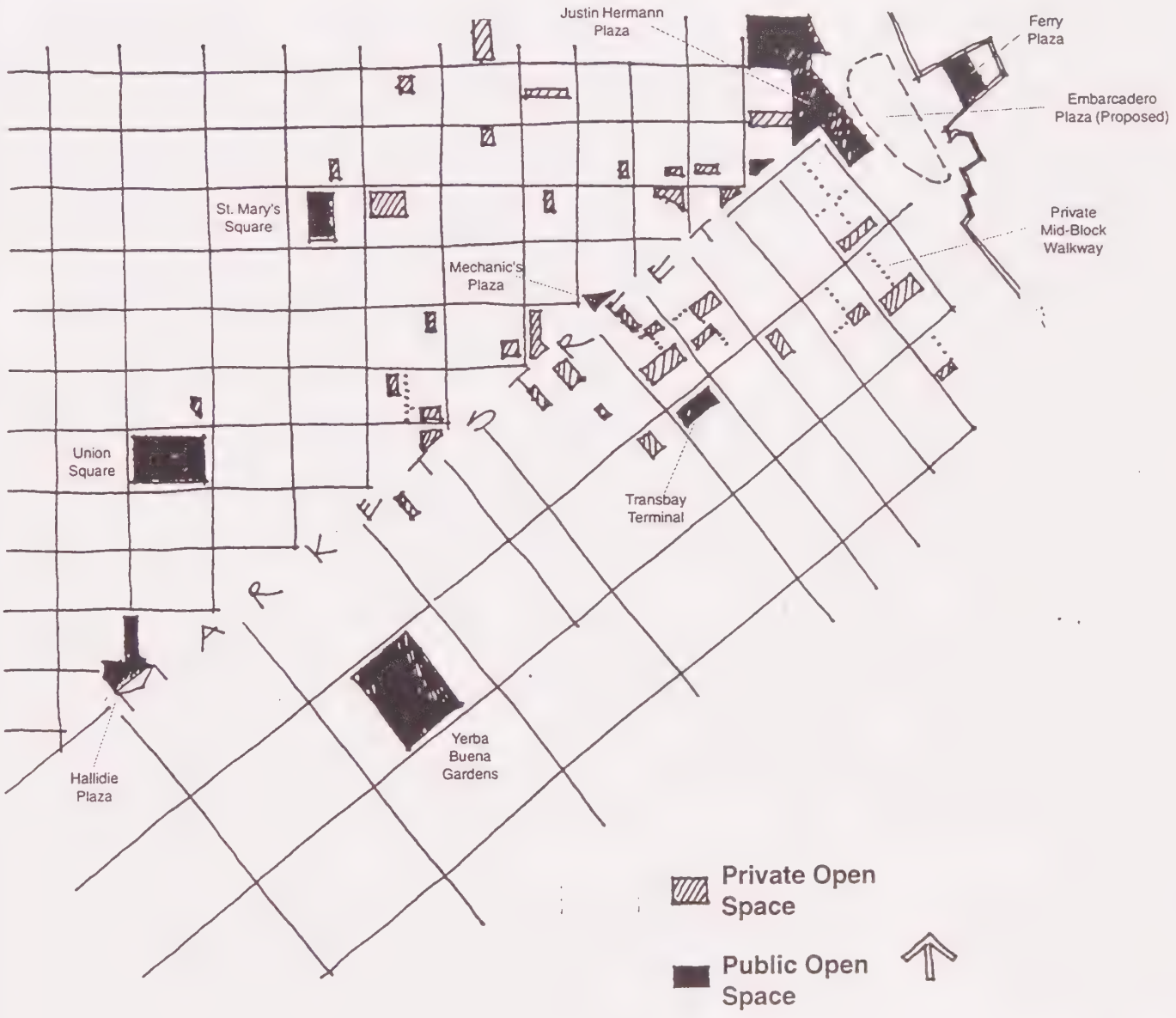
Figure 13

N

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995

Scale: 1" = 1/8 mile (approx.)



San Francisco Planning Department

Transbay Area Plan and Implementation Program

DOWNTOWN OPEN SPACES

Figure 14

Diagram not to scale

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Embarcadero Postal Center, located on the north side of Harrison between Main and Beale Streets, occupies half of the block with a recently remodelled seven story building. Half of this block is used as accessory parking for the Post Office and half of the adjacent lot to the east is used by Golden Gate Transit for midday bus storage. Adjacent to the Golden Gate Transit parking is a cluster of four to five story buildings some of which are used for office and industrial activities and some are vacant. This area had been identified as a possible location for an arena to house the Golden State Warriors. However, this possibility, always speculative, is now even more uncertain due to the recent change in ownership of the team.

Hills Plaza, located between Spear, Folsom, Steuart, and Harrison Streets, is a new mixed use development of 80 to 170 feet high. It accommodates retail use on the ground floor, office use along Spear Street, and residential condominiums on the top floors.

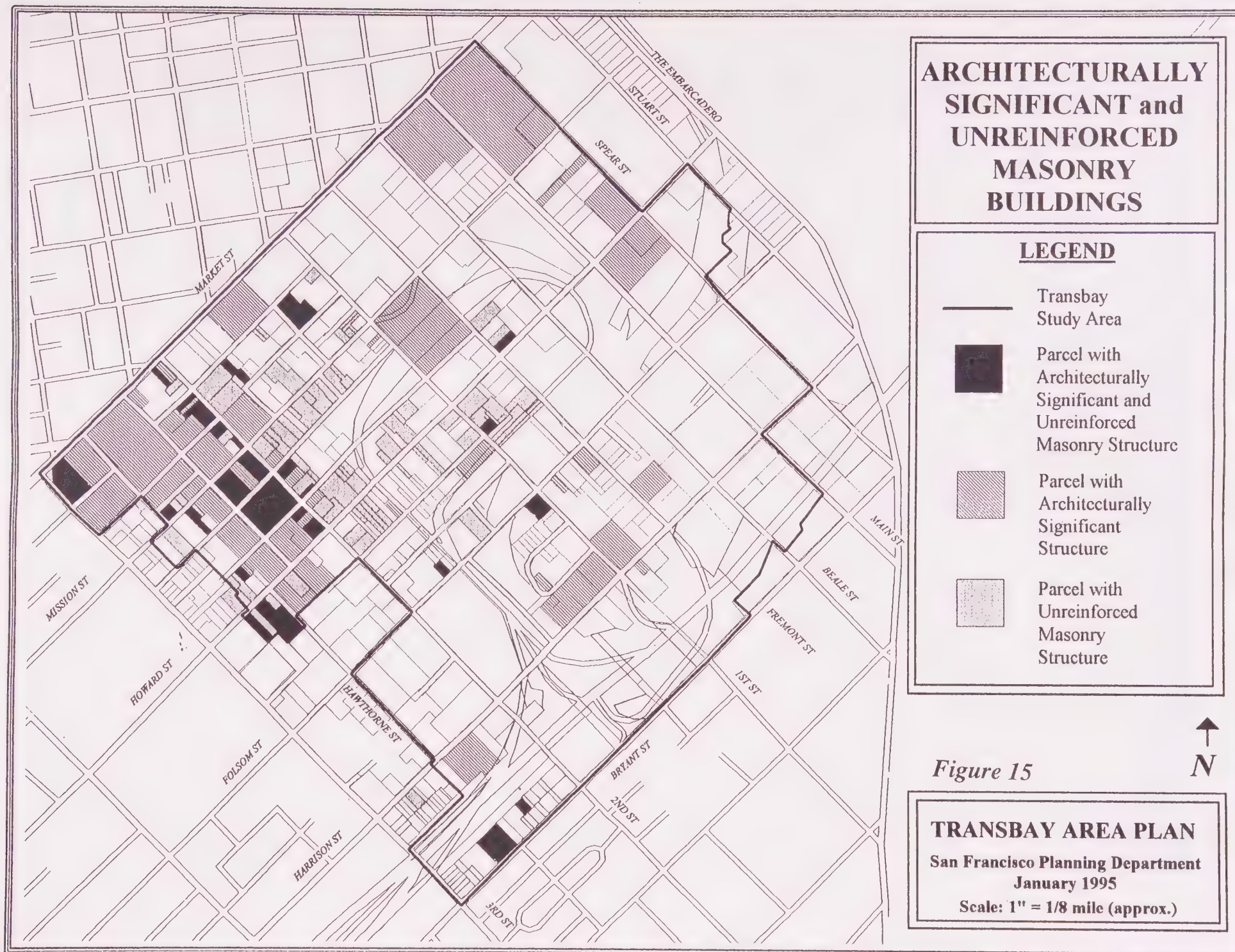
To the west of the former Terminal Separator Structure, along Second Street, there is a mixture of buildings with office space in the upper floors and ground floor retail. These structures are generally less than 100 feet high with the exceptions of Marathon Plaza and 600 Harrison Street. The area west of Second Street, which includes the San Francisco Museum of Modern Art and Yerba Buena Gardens, as well as Moscone Center, is characterized by a cultural and institutional use, mixed with retail and some office use along Market, Mission, New Montgomery, and Hawthorne Streets.

The area along the I-80 corridor, between Harrison and Bryant Streets, is mostly vacant with the exception of two large residential projects, Baycrest Tower which was recently completed and Portside at 401 Main Street, Phase I of which was recently completed. The area south of the off ramps, along I-80, is predominantly industrial with some residential, retail, and office uses. Parcels are generally small and buildings less than 40 feet high.

The Transbay Terminal overall study area covers approximately 210 acres. About 82 percent of the land in the primary study area is developed while the remaining 18 percent, about 24 acres, is vacant. Office is the predominant land use in the study area, both in terms of land coverage and building square footage. Office uses cover about one-third of all land area and occupy about 86 percent of all building space in the area. Industrial development covers about 15 percent of the study area, while public uses and parking cover about 8 percent each. These uses are much less intense than office, and combined occupy only about 5 percent of the total building square footage in the area (see Tables 11 and 12).

Residential uses cover only about 2.4 percent of the land in the study area, and only about 2 percent of total building area. According to the 1990 census, there were only 49 housing units in the study area. This number has been supplemented by the completion of the Baycrest condominium development which added 287 units. Nearly all of these are in multi-unit buildings. Although housing is a relatively minor component of the land use within the study area, it is a more significant use in the areas surrounding the study area.

There are 41 architecturally significant buildings in the study area, including the Transbay Transit Terminal which is considered eligible for the National Register of Historic Places. Approximately 110 buildings in the study area are constructed of unreinforced masonry (see Figure 15).


THE EMBARCADERO
STUART ST
SPEAR ST
MARKET ST
MAIN ST
BEALE ST
FREMONT ST
1ST ST
MISSION ST
HOWARD ST
HAWTHORNE ST
FOLSOM ST
BRYANT ST
2ND ST
HARRISON ST
3RD ST
ARCHITECTURALLY SIGNIFICANT and UNREINFORCED MASONRY BUILDINGS
LEGEND
Transbay Study Area
Parcel with Architecturally Significant and Unreinforced Masonry Structure
Parcel with Architecturally Significant Structure
Parcel with Unreinforced Masonry Structure
N
Figure 15
TRANSBAY AREA PLAN
San Francisco Planning Department
January 1995
Scale: 1" = 1/8 mile (approx.)

2. *Adjacent Areas*

South Beach, to the south of the Bay Bridge and east of First Street, is a Redevelopment Area that encourages mixed use development, primarily residential. The recently constructed condominium complexes are mainly three to four stories in height although there are some structures up to ten stories in height. These projects also contain some commercial use. To the west, between First and Second Streets, the area is composed of mixed uses, with industrial use most prevalent and office space clustered in the vicinity of the Second and Bryant Street intersection. The structures in this area are older and generally are no higher than five stories.

Mission Bay, south of Townsend Street, is the area with one of the highest potentials for development and employment growth in the city, planned for 4.8 million square feet of office space, 900,000 square feet of light industrial and institutional space, and 8,700 housing units. By 2010, it is estimated that 10,000 new jobs will be located in this area for a variety of activities such as office, research and development, commercial, and institutional. The northern portion of Mission Bay, the area between Third Street, China Basin Channel and Sixth Streets, is zoned as Mission Bay Office District (MB-O) which is proposed to be developed as large floor plate offices with ground floor retail in four to eight story structures. To the south of Townsend Street and west of Fourth Street is the CalTrain Station, and to the south of Berry Street and east of Fourth Street is the China Basin building, both of which are significant features of the area. The development of Phase One of the Mission Bay project includes the 255 King Street office building of 365,000 square feet which was approved in 1992. South of this office area, there are two small blocks zoned for high density residential use. To the west of the office area, between Sixth and Seven Streets, there is a block zoned for community facilities. This area has recently surfaced as the potential location for a new sports-oriented entertainment complex, possibly including a new baseball stadium and/or sports arena. The possible entertainment complex, which is very preliminary at this time, would partially supplant the office uses.

Meeting regional and local transit service needs into the 21st century, and taking advantage of the recent availability of vacant land freed up by the removal of the Terminal Separator Structure, offers significant opportunities for improvements in the area. The availability of large government owned parcels, or contiguous parcels owned by a single private owner support the feasibility of potential assembly of land for transit functions or development. These opportunities are enhanced by the central location of this area, at the southern border of the financial district, surrounded by potential growth areas such as Mission Bay and South of Market, and in the proximity of compatible entertainment, cultural, and convention facilities at Moscone and Yerba Buena Centers.

TABLE 11 - LAND USE by NET LAND AREA, and BUILDING AREA

LAND USE DESCRIPTION	TRANSBAY STUDY AREA LAND AREA (SqFt)	% of TOTAL	BUILDING AREA (SqFt)	% of TOTAL
COMMERCIAL GARAGE	118,028	1.8%	265,693	1.1%
GAS STATION	18,748	0.3%	1,590	0.0%
HOTEL	99,274	1.5%	493,684	2.1%
INDUSTRIAL	914,521	13.9%	1,188,149	4.9%
INSTITUTIONAL	97,768	1.5%	429,526	1.8%
OFFICE	2,180,020	33.2%	20,301,378	84.4%
PUBLIC	164,063	2.5%	0	0.0%
PARKING LOT / VACANT	1,611,721	24.6%	0	0.0%
RETAIL	331,110	5.0%	315,614	1.3%
RESIDENTIAL	241,577	3.7%	518,252	2.2%
TRANSPORTATION	787,278	12.0%	548,985	2.3%
TOTAL	**6,564,106**	**100.0%**	**24,062,871**	**100.0%**

Source: San Francisco Assessor's Office, Master Parcel Database, 9/94 and San Francisco Planning Department

TABLE 12 - ZONING by NET LAND AREA, and BUILDING AREA

ZONING DISTRICT		TRANSBAY STUDY AREA LAND AREA (SqFt)	% of TOTAL	BUILDING AREA (SqFt)	% of TOTAL
C-3-O	DOWNTOWN-OFFICE	2,006,700	34.7%	17,524,649	75.0%
C-3-O(SD)	DOWNTOWN- OFFICE (SPECIAL DEVELOPMENT)	987,495	17.1%	2,784,666	11.9%
C-3-S	DOWNTOWN SUPPORT	106,712	1.8%	199,067	0.9%
M-1	LIGHT INDUSTRIAL	545,329	9.4%	281,856	1.2%
P	PUBLIC	1,124,119	19.4%		
P/C-3-O(SD)	PUBLIC/ DOWNTOWN- OFFICE (SPECIAL DEVELOPMENT)	51,384	0.9%	231,551	1.0%
RC-4	RESIDENTIAL- COMMERCIAL, HIGH DENSITY	0	0.0%	0	0.0%
RC-4/M-1	RESIDENTIAL- COMMERCIAL, HIGH DENSITY/ LIGHT INDUSTRIAL	36,433	0.6%		
SSO	SOM SERVICE/ SECONDARY/ OFFICE	406,230	7.0%	1,691,404	7.2%
RINCON-R	RINCON HILL SPECIAL USE DISTRICT	520,420	9.0%	650,309	2.8%
TOTAL		**5,784,822**	**100.0%**	**23,363,502**	**100.0%**

Source: San Francisco Assessor's Office, Master Parcel Database, 9/94 and San Francisco Planning Department

B. LAND USE PLANS

1. *Area Plans* (see Figures 11, 12, and 13)

DOWNTOWN AREA PLAN

The Planning Department, City and County of San Francisco
1985

Relationship to Transbay Area Plan: The Downtown Area Plan is the comprehensive planning document for all development in the downtown area.

Summary: The Downtown Area Plan contains objectives and polices to guide decisions affecting the downtown area. It includes policies for: commerce, housing, open space, preservation, urban form, circulation, and seismic safety. These policies are directed towards fostering a downtown that encompasses a compact mix of activities, historical values, and distinctive architecture and urban forms that engender a special excitement of a world city.

Findings: The following objectives and policies are applicable to the Transbay Area Plan:

SPACE FOR COMMERCE

Objective 1: Manage economic growth and change to ensure enhancement of the total city living and working environment.

Policy 1: Encourage development which produces substantial net benefits and minimizes undesirable consequences. Discourage development which has substantial undesirable consequences which cannot be mitigated.

Objective 2: Maintain and improve San Francisco's position as a prime location for financial, administrative, corporate, and professional activity.

Policy 1: Encourage prime downtown office activities to grow as long as undesirable consequences of such growth can be controlled.

Policy 2: Guide location of office development to maintain a compact downtown core and minimize displacement of other uses.

Objective 3: Improve downtown San Francisco's position as the region's prime location for specialized retail trade.

Policy 1: Maintain high quality, specialty retail shopping facilities in the retail core.

Policy 2: Encourage the retail businesses which serve the shopping needs of less affluent downtown workers and local residents.

Policy 5: Meet the convenience needs of daytime downtown workers.

Objective 4: Enhance San Francisco's role as a tourist and visitor center.

Policy 1: Guide the location of new hotels to minimize their adverse impacts on circulation, existing uses, and scale of development.

Objective 5: Retain a diverse base of support commercial activity in and near downtown.

Policy 1: Provide space for support commercial activities within the downtown and in adjacent areas.

Objective 6: Within acceptable levels of density, provide space for future office, retail, hotel, service and related uses in downtown San Francisco.

Policy 1: Adopt a downtown land use and density plan which establishes subareas of downtown with individualized controls to guide the density and location of permitted land use.

SPACE FOR HOUSING

Objective 7: Expand the supply of housing in and adjacent to downtown.

Policy 1: Promote the inclusion of housing in downtown commercial developments.

Policy Facilitate conversion of under used industrial and commercial areas to residential use.

OPEN SPACE

Objective 9: Provide quality open space in sufficient quantity and variety to meet the needs of downtown workers, residents, and visitors.

Policy 1: Require usable indoor and outdoor open space, accessible to the public, as part of new downtown development.

Policy 2: Provide different kinds of open space downtown.

Policy 3: Give priority to development of two categories of highly valued open space; sunlit plazas and parks.

Policy 5: Improve the usefulness of publicly owned rights-of-way as open space.

Objective 10: Assure that open spaces are accessible and usable.

Policy 1: Develop an open space system that gives every person living and working downtown access to a sizable sunlit open space within convenient walking distance.

Policy 2: Encourage the creation of new open spaces that become a part of an interconnected pedestrian network.

Policy 3: Keep open space facilities available to the public.

Policy 4: Provide open space that is clearly visible and easily reached from the street or pedestrian way.

Objective 11: Provide contrast and form by consciously treating open space as a counterpoint to the built environment.

Policy 1: Place and arrange open space to complement and structure the urban form by creating distinct openings in the otherwise dominant streetwall form of downtown.

Policy 2: Introduce elements of the natural environment in open space to contrast with the built-up environment.

PRESERVING THE PAST

Objective 12: Conserve resources that provide continuity with San Francisco's past.

Policy 1: Preserve notable landmarks and areas of historic, architectural, or aesthetic value, and promote the preservation of other buildings and features that provide continuity with past development.

URBAN FORM

Objective 13: Create an urban form for downtown that enhances San Francisco's stature as one of the worlds's most visually attractive cities.

Policy 1: Relate the height of buildings to important attributes of the city pattern and to the height and character of existing and proposed development.

Policy 2: Foster sculpturing of building form to create less overpowering buildings and more interesting building tops, particularly the tops of towers.

Policy 4: Maintain separation between buildings to preserve light and air and prevent excessive bulk.

Objective 14: Create and maintain a comfortable pedestrian environment.

Policy 1: Promote building forms that will maximize the sun access to open spaces and other public areas.

Policy 2: Promote building forms that will minimize the creation of surface winds near the base of buildings.

Objective 15: To create a building form that is visually interesting and harmonizes with surrounding buildings.

Policy 2: Assure that new buildings contribute to the visual unity of the city.

Objective 16: Create and maintain attractive, interesting urban streetscapes.

Policy 1: Conserve the traditional street to building relationship that characterizes downtown San Francisco.

Policy 4: Use designs and materials and include activities at the ground floor to create pedestrian interest.

Policy 5: Encourage the incorporation of publicly visible art works in new private development and in various public spaces downtown.

MOVING TO AND FROM DOWNTOWN

Objective 17: Develop transit as the primary mode of travel to and from downtown.

Policy 1: Build and maintain rapid transit lines from downtown to all suburban corridors and major centers of activity in San Francisco.

Policy 2: Expand existing non-rail transit service to downtown.

Policy 3: Establish exclusive transit lanes on bridges, freeways and city streets where significant transit service exists.

Policy 4: Coordinate regional and local transportation systems and provide for interline transit transfers.

Policy 5: Provide for commuter bus loading at off-street terminals and at special curbside loading areas at non-congested locations.

Policy 6: Make convenient transfers possible by establishing common or closely located terminals for local and regional transit systems.

Objective 18: Ensure that the number of auto trips to and from downtown will not be detrimental to the growth or amenity of downtown.

Policy 2: Provide incentives for the use of transit, carpools and vanpools, and reduce the need for new or expanded automobile parking facilities.

Policy 3: Discourage new long-term commuter parking spaces in and around downtown. Limit long-term parking spaces serving downtown to the number that already exists.

Policy 5: Discourage proliferation of surface parking as an interim land use, particularly where sound residential, commercial or industrial buildings would be demolished.

Objective 19: Provide for safe and convenient bicycle use as a means of transportation.

Policy 1: Include facilities for bicycle users in governmental, commercial, and residential developments.

Policy 2: Accommodate bicycles on regional transit facilities and important regional transportation links.

Policy 3: Provide adequate and secure bicycle parking at transit terminals.

MOVING AROUND DOWNTOWN

Objective 20: Provide for the efficient, convenient and comfortable movement of people and goods, transit vehicles and automobiles within the downtown.

Policy 1: Develop the downtown core as an automobile control area.

Policy 2: Organize and control traffic circulation to reduce congestion in the core caused by through traffic and to channel vehicles into peripheral parking facilities.

Policy 4: Improve speed of transit travel and service by giving priority to transit vehicles where conflicts with auto traffic occur, and by establishing a transit preferential streets system.

Objective 21: Improve facilities for freight deliveries and business services.

Policy 1: Provide off-street facilities for freight loading and service vehicles on the site of new buildings sufficient to meet the demands generated by the intended uses. Seek opportunities to create new existing buildings.

Policy 2: Discourage access to off-street freight loading and service vehicle facilities from transit preferential streets, or pedestrian-oriented streets and alleys.

Policy 4: Provide limited loading spaces on street to meet the need for peak period or short-term small deliveries and essential services, and strictly enforce their use.

Objective 22: Improve the downtown pedestrian circulation system, especially within the core, to provide for efficient, comfortable, and safe movement.

Policy 1: Provide sufficient pedestrian movement space.

Policy 2: Minimize obstructions to through pedestrian movement on sidewalks in the downtown core.

Policy 3: Ensure convenient and safe pedestrian crossings.

Policy 4: Create a pedestrian network in the downtown core area that includes streets devoted to or primarily oriented to pedestrian use.

Policy 5: Improve the ambience of the pedestrian environment.

SEISMIC SAFETY

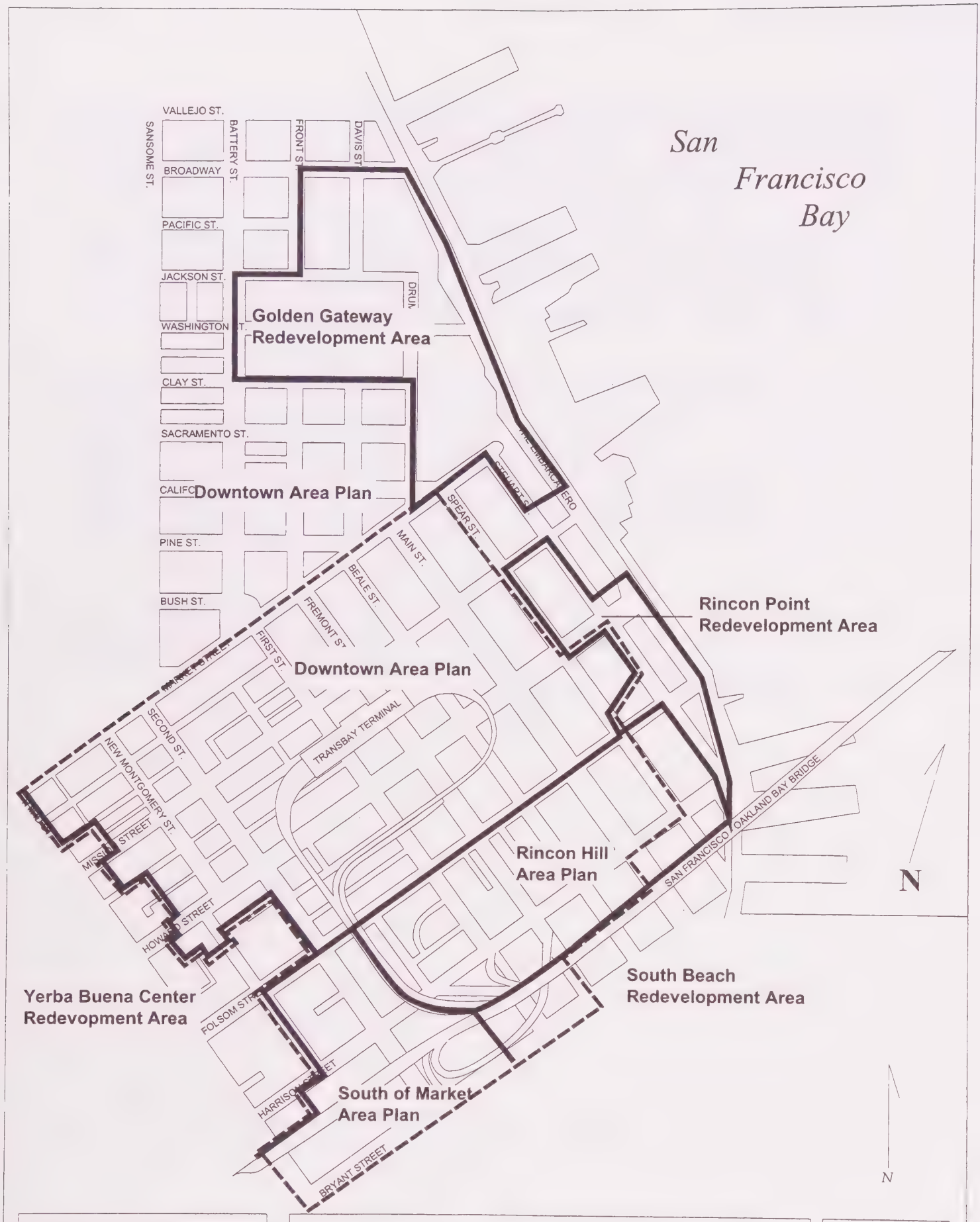
Objective 23: Reduce hazards to life safety and minimize property damage and economic dislocation resulting from future earthquakes.

Existing Zoning: The area to the north of the Folsom Street corridor is within the Downtown Plan area and belongs to the Downtown District (C-3). The Downtown District concentrates most of the office activity in the city, and it is defined as the center for City, regional, national, and international commercial activities. High density residential uses are permitted in the C-3 Districts as of right.

The area between Natoma and Market Street is zoned C-3-0 which plays a leading national role in finance, corporate headquarters and service industries, and serves as an employment center for the region. To the west of Third Street, is the Downtown Retail District C-3-R which serves as a regional center for comparison shopper retailing and direct consumer services, well served by City and regional transit.

The area between Natoma and Folsom Street is zoned as Downtown Office Special Development District C-3-0 (SD) which allows for expansion of the financial district in order to maintain a compact downtown core. To the west of the C-3-0 (SD) district, is the Downtown Support District C-3-S which serves as an expansion area for offices at a lesser intensity than in the Downtown Office District and accommodates support functions such as wholesaling, printing, building services, secondary office space and parking. There are also two small "islands" of Downtown Support District directly south of the former Terminal Separator Structure on the north side of Folsom Street.

The Folsom Street corridor formerly occupied by the Terminal Separator Structure is within an 80-X height and Bulk District to protect the views from the Terminal Separator Structure. Height Districts to the north and south of the Folsom Street corridor are both 200 feet. The area occupied by the Transbay Terminal and its ramps are zoned Public.



San Francisco Planning Department

Transbay Area Plan and Implementation Program

LAND USE PLANS

Study Area Boundary

Figure 16

Diagram not to scale

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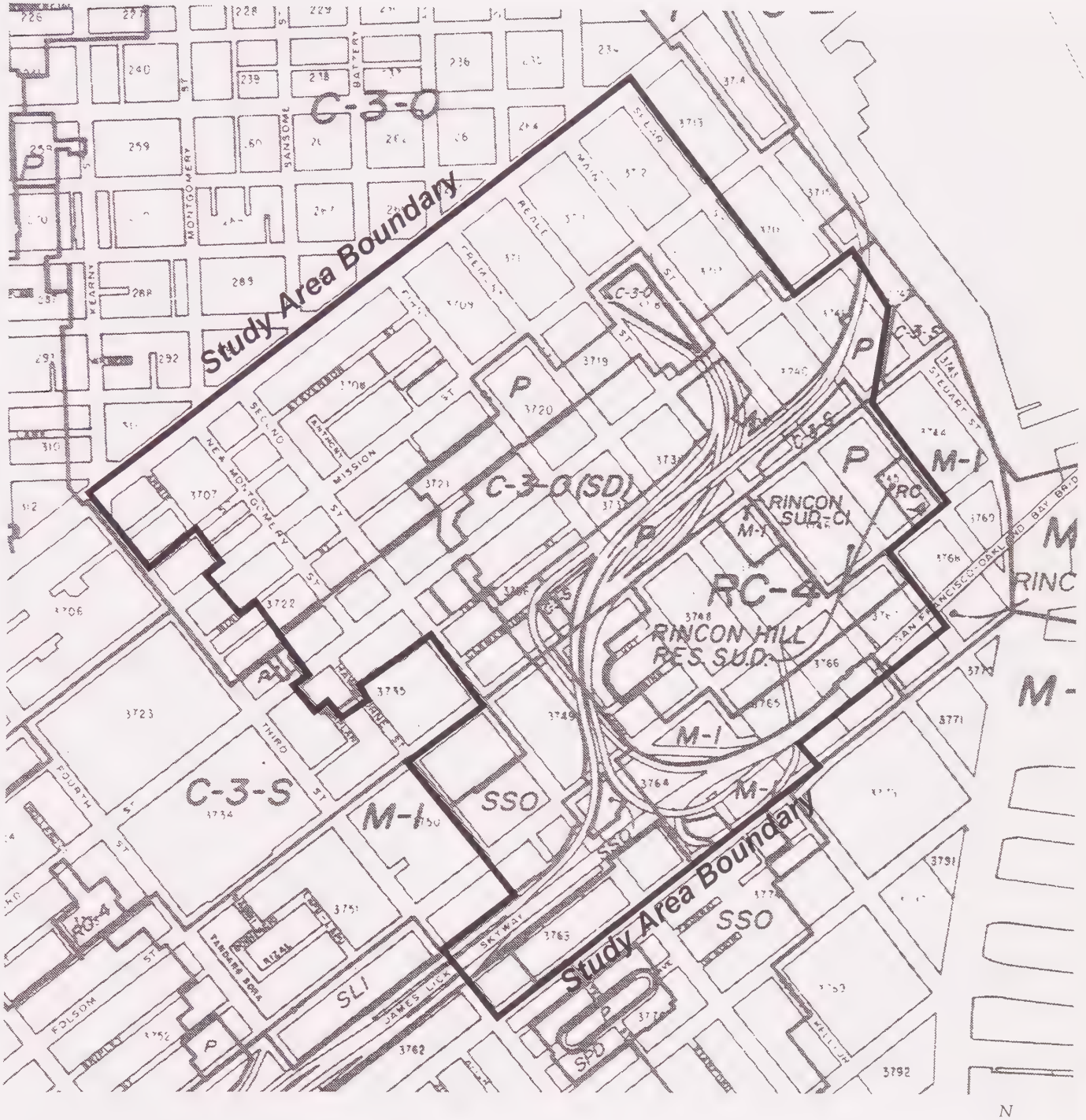

San Francisco Planning Department

Transbay Area Plan and Implementation Program

EXISTING USE DISTRICTS

Figure 17

Diagram not to scale

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San Francisco Planning Department
Transbay Area Plan and Implementation Program

EXISTING HEIGHT DISTRICTS

Figure 18

Diagram not to scale

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RINCON HILL AREA PLAN

The Planning Department, City and County of San Francisco
1985

Relationship to Transbay Area Plan: The Rincon Hill area is within the study area and is bounded by Folsom, Bryant, the Terminal Separator, and the Embarcadero.

Summary: The Rincon Hill Plan is a plan for the emergence of a new mixed-use neighborhood on Rincon Hill, a twelve-block area close to downtown. It is an area that is highly visible because it is framed by the Bay Bridge.

Findings: The plan identifies Rincon Hill as a high priority housing site that is also appropriate for mixed-use development, offices, recreation, service, and retail. The plan envisions that this mixed-use development (especially the modest office component, primarily large floor plate "back offices") will help to trigger the growth of housing.. The Plan creates two sub-areas: a commercial/industrial core (Spear to First, Folsom to Harrison) surrounded by residential development, including tall buildings at the top of the hill. The Plan also calls for the reduction in street width on Main, Beale, and Spear, and for the creation of an interior circulation and open space system.

Key objectives and policies include:

LAND USE

Objective 1: To create a unique residential neighborhood close to downtown which will contribute significantly to the City's housing supply.
Objective 2: To create space for additional uses which will provide needed services for the resident population.
Objective 3: To allow existing industrial, service and office uses to remain and create new such uses in designated locations.
Objective 4: To provide quality housing in a pleasant environment that has adequate access to light, air, and open space.
Objective 6: To preserve existing housing units on Guy Place and Lansing Street.

URBAN DESIGN

Objective 7: To achieve an aesthetically pleasing residential community.
Objective 8: To capitalize on the unique qualities of Rincon Hill, specifically its sweeping views of the Bay, its proximity to downtown, and its relationship to the Waterfront and the Bay.
Objective 9: To respect the natural topography of the hill and follow the policies already established in the urban design element which restrict height near the water and allow increased height on the top of hills.
Objective 10: To preserve views of the Bay and the Bay Bridge which are among the most impressive in the region.

Objective 11: To maintain view corridors through the area by means of height and bulk controls which insure carefully space slender towers rather than bulky, massive buildings.
Objective 12: To reduce the present industrial scale of the streets by creating a circulation network through he interior blocks, creating a street scale comparable to those in existing residential areas elsewhere in the City.
Objective 13: To reduce the widths of Main, Spear, and Beale Streets to create additional developable area as well as new pedestrian space.
Objective 14: To keep wind speeds at a comfortable level.
Objective 15: To encourage a human scale streetscape with activities and design features at pedestrian eye level.

RECREATION AND OPEN SPACE
Objective 16: To develop facilities for passive and active recreation serving residents employees and visitors.
Objective 17: To link the area to the major public open spaces and to the waterfront promenade at the foot of the hill.
Objective 18: To coordinated parks and pedestrian pathways with projects encompassed in the Northeastern Waterfront Plan and the South Beach-Rincon Point Development Plan.
Objective 19: To create publicly accessible scenic overlooks and viewing areas.
Objective 20: To create an inviting and pleasant pedestrian corridor to the Financial District.

CIRCULATION
Objective 21: To create safe and pleasant pedestrian networks within the Rincon Hill area, to downtown, and the Bay.
Objective 22: To reduce widths of selected streets to those which meet circulation needs and complement residential use.
Objective 23: To improve transit service to and from Rincon Hill.
Objective 24: To provide sufficient off-street parking space for residents.
Objective 25: To encourage creation of intercept and joint use parking structures.
Objective 26: To reduce congestion at bridge ramps by improving loading patterns.

PRESERVATION
Objective 27: To preserve and adaptively reuse those buildings in the area which have particular architectural or historical merit or which provide a scale and character of development consistent with the plan.

Status: Since the adoption of the Rincon Hill Plan, the physical and transportation context has changed with the demolition of the Embarcadero freeway and much of the Terminal Separator Structure. One major mixed-use development has been completed (Hills Plaza on the block bounded by Steuart, Folsom, Spear and Harrison Streets). Two primarily residential buildings, Portside at Bryant and Main Streets, and Baycrest Towers on Harrison between Main and Beale Streets have been completed

.

Existing Zoning: The area between the Bay and Folsom, Essex, and Bryant Streets is in the Rincon Hill Plan area, which is conceived as a housing resource area adjacent to downtown. There are two Special Use Districts (SUDs) within the Rincon Hill zoning district. The Residential SUD/RC-4 accommodates high density housing with a mix of retail and personal services to support the residential uses. There are no FAR or housing density limits, so residential and commercial density is set by the bulk and height limits defining the building envelope. Commercial uses are limited to a ratio of one square foot of commercial space for every six square feet of residential space. The second SUD, Commercial/Industrial, provides a buffer of office and parking uses between the residential uses and traffic generators such as the Bay Bridge, the Terminal Separator Structure and the Embarcadero, and allows the existing industrial, service and office uses to remain.

The two blocks bounded by Main, Harrison, Beale and Folsom Streets are primarily zoned Public (P) to accommodate the existing Federal- and State-owned land, and to allow the potential for a new arena/ballpark site.

SOUTH OF MARKET PLAN

The Planning Department, City and County of San Francisco
1991

Relationship to Transbay Area Plan: The South of Market Area is defined in the plan by (approximately) the area south of Mission Street, north of Division and Townsend Streets, east of 12th Street and west of First Street/Ecker Street, and does not include the Redevelopment Areas of Yerba Buena and Rincon Point/South Beach, or any portion of the Transbay Area north of Folsom Street.

Summary: The intent of this plan is to conserve the back office/light industrial/artist-loft spaces/entertainment and certain residential (especially affordable residential) enclaves in the neighborhood by permitting those uses in preference to office space. Heights and uses of buildings in this area are controlled to reflect this intention. Historic Resources are identified for preservation, and special zoning districts allowing mixtures of industrial uses, live-work spaces and services are established to implement the objectives of the plan.

Findings: N/A

Status: The South of Market Plan and controls are currently in effect.

Existing Zoning: The area between Essex and Hawthorne Street is within the South of Market Plan which is conceived as preserving the mixed service, light industrial, and residential character of the greater South of Market Area. This area is zoned as a Service/Secondary Office (SSO) sub-district which allows limited office uses designed to accommodate small scale light industrial, small scale professional office, large floor-plate back office and live-work uses. The area to the west of Hawthorne Street is zoned light industrial (M-1) providing land for industrial development, specially small industries.

PROPOSITION H, WATERFRONT PLAN

Draft 1994

The Waterfront Plan is a land use plan being developed by the Port of San Francisco for the entire area under its jurisdiction, generally from Hyde Street Pier in Fisherman's Wharf to India Basin to the south-east. This study was mandated by the passage of Proposition H in 1990. The Plan is intended to guide use and development of Port lands. Currently the Plan is undergoing environmental review process which is expected to be completed within the next two years.

Two development scenarios and a no-project scenario are being analyzed for this area plan. These three alternatives represent a progression from minimum to maximum new development and activity level. Proposed uses include maritime, residential, retail, office, and industrial. The focus of one of the development alternatives is maritime use, with mixed uses are permitted as well. The focus of the other development alternative is mixed use which allows maritime uses as well and would be the more intense use of the two development scenarios

NORTHEASTERN WATERFRONT AREA PLAN

1977 (Latest Revision 1991)

Relationship to Transbay Area Plan: The Northeastern Waterfront Area Plan is the comprehensive planning document for the waterfront from Fisherman's Wharf to Mission Bay. Its contains policies for the Ferry Building area immediately to the east of the study area.

Summary: The plan contains comprehensive improvements for the waterfront area including open space, transit, new development, and the retention of maritime uses.

Findings: The plan calls for the reestablishment of the Ferry Building as a major transit center, the eastern terminus to Market Street, and a major entryway to the City from the water. A simple, elegant promenade would link Pier 7 to Pier 2 maintaining a visual corridor along the water's edge and creating a variety of water edge experiences.

South of the Ferry Building, in the Howard to Harrison Street area, the plan calls for the creation of a mixed use activity center. The activity center would be comprised of a major water-related, soft surface public park, with a "Tavern-on-the-Green" type of restaurant in the park north of Folsom Street, public access and fishing areas on Pier 24, and a hotel inland of the park.

South of the Bay Bridge, Piers 26-38 would continue in break-bulk cargo handling and related shipping activities. Piers 42-46A and a portion of Pier 40, which are presently almost vacant and in unsound condition, would be removed and the area developed as a full service marina and small boat harbor. Inland of the harbor, a large waterfront park with dramatic views would be provided.

On inland areas, the plan stipulates the retention of industrial uses and historic structures and the building of a mixed-income residential community with open spaces and support services where vacant or underutilized property presently exists.

Recommendations for the Embarcadero include a waterfront boulevard, the creation of a historic rail transit line to serve commuter and recreational users, the continuation of service to maritime activities by the Belt Freight Rail Line, and, changes in the manner in which parking should serve the waterfront and downtown areas.

Status: Since the adoption of the Plan, elements of the Plan have been implemented, including the waterfront promenade, and the context of planning for the Waterfront has changed dramatically. The Freeway has been torn down, the South Beach area has seen considerable development, and Proposition H has mandated a new Waterfront planning process.

MID-EMBARCADERO OPEN SPACE PROJECT

City and County of San Francisco--Chief Administrative Officer's Waterfront Transportation Projects Office August 1994

Relationship to Transbay Area Plan: The mid-Embarcadero area is one block east of the study area, and the future configuration of the roadway will affect traffic patterns in the study area. The open space recommendations will also affect the primary existing open spaces and pedestrian destinations at the eastern edge of the study area including Justin Herman and Ferry Plazas. When completed, the proposed open space would be a major pedestrian destination for workers from throughout the study area.

Summary: The MEOS report summarizes the results of the second phase of planning for the Mid-Embarcadero Open Space Project. Undertaken in conjunction with the Mid-Embarcadero Roadway Replacement Project, the intent of the MEOS project is to create a grand civic space at the foot of Market Street, in front of the Ferry Building and to reconnect the city with its waterfront.

Findings: Three alternative roadway alignments were considered to define the eastern edge of the open space. Selected, as the preferred alternative is Alternative C, the paired, curved roadway alignment, that provides a public plaza in front of the Ferry Building and does not encroach in the existing open space.

As a result of the removal of The Embarcadero Freeway, parcels in the Clay/Washington corridor (Assessor's Blocks 203 and 202) will be transferred from the state to the city. Both blocks are currently zoned P (Public) with an OS (Open Space) designation. The report recommends that the eastern half of Block 202 be preserved for open space purposes, the western half of Block 202 be made available for some development of a public nature, and Block 203 be made available for private development.

Based on an evaluation of potential funding sources and an estimated cost of $18 million, two alternative funding scenarios were identified for Alternative C. The Grant/Private/Public Debt Scenario advocates a combination of grant and roadway funding, private developer contributions from Block 203, an assessment district, private fund raising and/or cost reduction measures. The Redevelopment Scenario proposes grant and roadway funding, tax increment bonds, developer contributions from Block 203, private contributions, and/or cost reduction measures.

Status: The projected completion of the project in 1998. However, construction is contingent of the Roadway/TSS EIS/EIR and identifying funding sources. The next phase to be completed by 1996 will consist of a detailed open space design including construction drawings.

FERRY BUILDING HISTORIC RENOVATION

This project involves the historic renovation and rehabilitation of San Francisco's Ferry Building into as a major civic landmark and transportation center. The project will include a mix of transportation and public and commercial uses. Several use alternatives have been developed for this project. The project is undergoing environmental review process which will be completed next year.

DESTINATION DOWNTOWN: STREETSCAPE INVESTMENTS FOR A WALKABLE CITY--THE DOWNTOWN STREETSCAPE PLAN

The Planning Department, City and County of San Francisco
August 1994

Relationship to Transbay Area Plan: The pedestrian street classifications, improvements and design guidelines in the Downtown Streetscape Plan affect all of the streets in the study area, north of Folsom Streets.

Summary: The Downtown Streetscape Plan is the guiding document for the Downtown Pedestrian Network, a street classification system based on pedestrian needs. It contains design guidelines for all pedestrian improvements and a series of proposed pedestrian projects (totalling $12 million) to be implement by both the public and private sectors.

Findings: The Plan establishes a minimum standard for all of the streets in the downtown. Within the study area, the Plan classifies Mission Street as the most significant pedestrian street in the district, one that would warrant special attention with a particular focus on the pedestrian-transit connections. New Montgomery, Second, and Steuart Streets are designated as "Second Level" streets appropriate for a wide range of pedestrian-oriented improvements. Minna, Ecker, and Shaw Streets, and the Terminal Separator right-of-way are identified as potential pedestrian connections within the south of Market area (see Figure 8 on page 26).

Status: The Plan is scheduled for adoption in Spring 1995. Subsequent to adoption, all streetscape improvement must conform to the guidelines. Implementation of the capital projects in the Plan will begin with sales tax and ISTEA funded projects on Fourth Street and Ecker Street starting in 1995. Other capital projects are dependent on identifying funding sources.

2. *Redevelopment Plans*

RINCON POINT/SOUTH BEACH REDEVELOPMENT PLAN
SFRA/DCP
October 1992

Relationship to the Transbay Area Plan: The western boundaries of the Rincon Point Redevelopment Area and northern boundaries of the South Beach Redevelopment Area are contiguous with the southern and eastern boundaries of the Transbay Area.

Summary: 1,900-3,450 dwelling units are proposed in these two areas. Commercial space will be oriented toward neighborhood convenience (including office, retail, eating/drinking establishments). One parcel is designated for large office building. Warehousing activity is permitted, with two existing warehouses programmed for adaptive re-use. There will be two large waterfront parks and a small boat harbor added as well.

Status: Commercial and residential spaces is completed or under construction in much of the project areas. The small boat harbor is completed and work will begin on the open space in the near future. Currently, there is a proposal for an office/residential building at First and Bryant Streets.

YERBA BUENA CENTER REDEVELOPMENT PLAN
SFRA
November 1981
Amendments to the Yerba Buena Center Redevelopment Plan
July 1994

Relationship to the Transbay Area Plan: The eastern boundaries of the Yerba Buena Center project boundaries are contiguous with the western boundaries of the Transbay Area.

Summary: The total $2 billion project area is 87 acres extending from Market to Harrison Street, Second Street to the west property of Fourth Street. The area plan designates the northern and eastern portions of Yerba Buena Center as downtown office space, the south-central and western portion as housing (business and light industry as alternate uses), the southern portion as business services and light industry (housing as alternate use), and the central and eastern portions as "Special Use." The land use controls largely conform to the adjacent zoning districts.

Status: The core areas of the Center are substantially built out, with much of the south-central portion as housing (1,826 units), and the Special Use area as convention, educational and cultural facilities, open space and commercial, with mixed uses of dining/drinking introduced throughout. There are two large hotels in operation and office, entertainment, recreational and retail uses also planned. Future development will also include a 350,000 s.f. entertainment/retail complex, a 340 room hotel, a 500,000 s.f. commercial building, a multi-use Children's Center (ice rink, bowling

alley, carousel, park, and child care). The Center for the Visual Arts and the Center for the Performing Arts opened in 1993, and the new Museum of Modern Art opened in January 1995.

EMBARCADERO - LOWER MARKET (GOLDEN GATEWAY) REDEVELOPMENT PLAN

SFRA
November 1976

Amendment to the Embarcadero - Lower Market (Golden Gateway) Redevelopment Plan

SFRA
October 1994

Relationship to the Transbay Area Plan: The southeastern boundaries of the Golden Gateway Redevelopment Area are contiguous with the northern boundaries of the Transbay Area.

Summary: Implementation of the 51 acre Golden Gateway Redevelopment Project began in early 1960s has generated 1,400 new housing units, an 840 room hotel, 3 million s.f. of office/commercial space, and 12 acres of public open space. Mid- to high-density housing is located in the northern third of the project area, and six office towers with retail/dining/drinking/entertainment uses at the lower levels (Embarcadero Center) comprise the core area. The area also includes a large hotel and several open spaces, the largest of which is Justin Hermann Plaza.

Findings: N/A

Status: The demolition of the Embarcadero Freeway and the reconstruction of the Embarcadero Roadway have resulted in a new vacant parcels and a plans for significant reconfiguration of the open spaces in the area.

3. *General Plans*

THE MASTER PLAN OF THE CITY AND COUNTY OF SAN FRANCISCO

The Planning Department, City and County of San Francisco

Relationship to Transbay Area Plan: The Master Plan is the guiding document for planning the use of land in the City and County as mandated by the City's charter.

Summary: State law requires that the Master Plan address seven issues: land use, circulation, housing, conservation, open space, noise, and safety. In San Francisco these are contained in the following elements: Residence, Commerce and Industry, Recreation and Open Space, Transportation, Urban Design, Environmental Protection, Community Facilities, Community Safety, and Arts. In addition, there are nine area plans: Downtown, Chinatown, Rincon Hill, Civic

Center, Van Ness Avenue, Western Shoreline, Northeastern Waterfront, Central Waterfront, and South Bayshore.

Findings: The following Priority Policies of the Master Plan were established by Proposition M in 1986:

1. That existing neighborhood-serving retail uses be preserved and enhanced and future opportunities for resident employment in and ownership of such businesses enhanced;
2. That existing housing and neighborhood character be conserved and protected in order to preserve the cultural and economic diversity of our neighborhoods.
3. That the City's supply of affordable housing be preserved and enhanced;
4. That commuter traffic not impede Muni transit services or overburden our streets or neighborhood parking;
5. That a diverse economic base be maintained by protecting our industrial and service sectors from displacement due to commercial office development, and that future opportunities for resident employment and ownership in these sectors be enhanced;
6. That the City achieve the greatest possible preparedness to protect against injury and the loss of life in an earthquake;
7. That landmarks and historic buildings be preserved; and
8. That our parks and open space and their access to sunlight and vistas be protected from development.

Status: The Master Plan is an active document used as the basis for all land use decisions. Updates of Master Plan elements and Area Plans are on-going. Two elements, Transportation and Air Quality are scheduled for adoption in 1995.

URBAN DESIGN ELEMENT

The Planning Department, City and County of San Francisco
1973

Relationship to Transbay Area Plan: The Urban Design element supplements the urban form controls in the Downtown and Rincon Hill Area plans.

Summary: The Urban Design Element was one of the first comprehensive urban design plans in the U.S. It concerns the physical character and order of the City, and the relationship between people and their environment. It is a general plan, responding to issues relating to City Pattern, Conservation, Major New Development, and Neighborhood Environment.

Findings: The following objectives, policies, and fundamental principles are applicable to the Transbay Area Plan:

CITY PATTERN

Objective 1: Emphasis of the characteristic pattern which give to the city and its neighborhoods an image, a sense of purpose and a means of orientation.

Policy 1: Recognize and protect major views in the city, with particular attention to those of open space and water.

Policy 2: Recognize, protect, and reinforce the existing street pattern, especially as it is related to topography.

Policy 3: Recognize that buildings, when seen together, produce a total effect that characterizes the city and its districts.

Policy 5: Emphasize the special nature of each district through distinctive landscaping and other features.

Policy 6: Make centers of activity more prominent through design of street features and by other means.

Policy 7: Recognize the natural boundaries of districts, and promote connections between districts.

Policy 8: Increase the visibility of major destination areas and other points for orientation.

Policy 9: Increase the clarity of routes for travelers.

CONSERVATION

Objective 2: Conservation of resources which provide a sense of nature, continuity with the past, and freedom from overcrowding.

Policy 4; Preserve notable landmarks and areas of historic, architectural or aesthetic value, and promote the preservation of other buildings and features that provide continuity with past development.

Policy 6: Respect the character of older development nearby in the design of new buildings.

Policy 7: Recognize and protect outstanding and unique areas that contribute in an extraordinary degree to San Francisco's visual form and character.

Policy 8: Maintain a strong presumption against the giving up of street areas for private ownership or use, or for construction of public buildings.

Policy 9: Review all proposals for the giving up of street areas in terms of all the public values that streets afford.

Policy 10: Permit release of street areas, where such release is warranted, only in the least extensive and least permanent manner appropriate to each case.

Fundamental Principles for Conservation

2. New development can enhance and preserve San Francisco's distinctive qualities if it is designed with consideration for the prevailing design character and the effect on surroundings.

5. Preservation of San Francisco's strong and continuous downtown street facades will ensure maintenance of that areas's distinctive character and spatial quality.

12. Street space provides an important form of public open space, especially in areas of high density that are deficient in other amenities.

13. Street space provides light, air, space for utilities and access to property.

14. Street space services as a means to control and regulate the scale and organization of the future development by: a. protecting against the accumulation of overly large parcels of property under single ownership on which massive buildings could be constructed; and b. indirectly controlling the visual scale and density of development, as well as maintaining continuity of facades.

16. Views from streets can provide a means for orientation and help the observer to perceive the city and its districts more clearly.

17. Blocking, construction or other impairment of pleasing street views of the Bay or Ocean, distant hills, or other parts of the city can destroy an important characteristic of the unique setting and quality of the city.

MAJOR NEW DEVELOPMENT

Objective 3: Moderation of major new development to complement the city pattern, the resources to be conserved, and the neighborhood environment.

Policy 1: Promote harmony in the visual relationships and transitions between new and older buildings.

Policy 3: Promote efforts to achieve high quality of design for buildings to be constructed at prominent locations.

Policy 4: Promote building forms that will respect and improve the integrity of open spaces and other public areas.

Policy 5: Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development.

Policy 6: Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction.

Policy 8: Discourage accumulation and development of large properties, unless such development is carefully designed with respect to its impact upon the surrounding area and upon the city.

Fundamental Principles for Major New Development

3. Clustering of larger, taller buildings at important activity centers (such as major transit stations) can visually express the functional importance of these centers.

5. Taller or more visual prominent building can provide orientation points and increase the physical distinction, variety and contrast of large areas with similar streets and buildings, particularly areas of unrelieved monotony.

9. Unique building forms can appropriately signify major community facilities.

10. Major public buildings of symbolic importance may be appropriately located in highly visible settings.

RESIDENCE ELEMENT

The Planning Department, City and County of San Francisco
1990

Relationship to Transbay Area Plan: The Residence Element outlines policies for potential housing sites in the study area.

Summary: The Residence Element addresses housing quantity, affordability, quality, and accessibility.

Findings: The following objectives and policies are applicable to the Transbay Area Plan:

SUPPLY OF NEW HOUSING

Objective 1: To provide new housing for all income groups in appropriate locations.

Policy 1: Encourage development of housing on surplus, underused and vacant public lands.

Policy 2: Facilitate the conversion of underused industrial and commercial areas to residential use.

Policy 3: Promote the inclusion of housing in downtown commercial developments.

HOUSING DENSITY

Objective 2: To increase substantially the supply of housing without overcrowding or adversely affecting the prevailing character of existing neighborhoods.

Policy 2: Encourage higher residential density in areas adjacent to downtown and in neighborhood commercial districts where higher density will not have harmful effects.

AFFORDABILITY OF HOUSING

Objective 5: To provide housing affordable by all income groups, particularly low and moderate income households.

Policy 1: Use the City's financial powers and resources to reduce the cost and increase the supply of low and moderate income housing.

Policy 8: Ensure that office developments and higher educational institutions assist in meeting the housing demand they generate.

COMMERCE AND INDUSTRY ELEMENT

The Planning Department, City and County of San Francisco
1988

Relationship to Transbay Area Plan: The Commerce and Industry Element outlines policies for commercial development in the study area.

Summary: The Commerce and Industry Element sets forth objectives and policies that address the broad range of economic activities, facilities and support systems that constitute San Francisco's employment and service base. The plan serves as a comprehensive guide for both the public and

private sectors when making decisions related to economic growth and change. The plan is framed within three overriding goals which call for continued economic vitality, social equity and environmental quality, and three general objectives which call form managing economic growth and change to ensure enhancement of the total city environment, maintaining a sound and diverse economic base and fiscal structure, and providing expanded employment opportunities for city residents, particularly those that are unemployed.

Findings: The following objectives and policies are applicable to the Transbay Area Plan:

Objective 1: Manage economic growth and change to ensure enhancement of the total city living and working environment.

Policy 1: Encourage development which provides substantial net benefits and minimizes undesirable consequences. Discourage development which has substantial undesirable consequences that cannot be mitigated.

Policy 2: Assure that all commercial and industrial uses meet minimum, reasonable performance standards.

Policy 3: Locate commercial and industrial activities according to a generalized commercial and industrial land use plan.

Objective 2: Maintain and enhance a sound and diverse economic base and fiscal structure for the City.

Policy 1: Seek to retain existing commercial and industrial activity and to attract new such activity to the city.

Policy 2: Seek revenue measures which will spread the cost burden equitably to all users of city services.

Policy 3: Maintain a favorable social and cultural climate in the city in order to enhance its attractiveness as a firm location.

Objective 3: Provide expanded employment opportunities for city residents, particularly the unemployed and economically disadvantaged.

Policy 1: Promote the attraction, retention and expansion of commercial and industrial firms which provide employment improvement opportunities for unskilled and semi-skilled workers.

Policy 2: Promote measures designed to increase the number of San Francisco jobs held by San Francisco residents.

Policy 3: Emphasize job training and retraining programs that will impart skills necessary for participation in the San Francisco labor market.

Policy 4: Assist newly emerging economic activities.

Objective 4: Improve the viability of existing industry in the city and the attractiveness of the city as a location for new industry.

Policy 2: Promote and attract those economic activities with potential benefit to the City.

Policy 3: Avoid public actions that displace existing viable industrial firms.

Policy 4: When displacement does occur, attempt to relocate desired firms within the city.

Policy 5: Avoid encroachment of incompatible land uses on viable industrial activity.

Policy 8: Provide for the adequate security of employees and property.

Policy 11: Maintain an adequate supply of space appropriate to the needs of incubator industries.

Objective 7: Enhance San Francisco's position as a national regional center for governmental, health, and educational services.

Policy 2: Encourage the extension of needed health and educational services, but manage expansion to avoid or minimize disruption of adjacent residential areas.

Objective 8: Enhance San Francisco' position as a national center for conventions and visitor trade.

Policy 1: Guide the location of additional tourist related activities to minimize their adverse impacts on existing residential, commercial, and industrial activities.

Policy 3: Assure that areas of particular visitor attraction are provided with adequate public services for both residents and visitors.

RECREATION AND OPEN SPACE ELEMENT

Planning Department, City and County of San Francisco
1988

Relationship to Transbay Area Plan: The Recreation and Open Space Element outlines policies for open space in the study area.

Summary: The Recreation and Open Space Element outlines a framework for the maintenance and expansion of the City's open space resources. It identifies existing open space service areas, including areas that are currently not adequately served.

Findings: The following objectives and policies are applicable to the Transbay Area Plan:

Objective 2: Develop and maintain a diversified and balanced citywide system of high quality public open space.

Policy 1: Provide an adequate total quantity and equitable distribution of public open spaces throughout the City.

Policy 2: Preserve existing open space.

Policy 3: Preserve sunlight in public open spaces.

Policy 6: Make open spaces accessible to people with special needs.

Policy 7: Acquire additional open space for public use.

Objective 4: Provide opportunities for recreation and the enjoyment of open space in every San Francisco neighborhood.

Policy 1: Make better use of existing facilities.

Policy 2: Maximize joint use of other properties and facilities.

Policy 5: Require private usable outdoor open space in new residential development.

Policy 6: Assure the provision of adequate public open space to serve new residential development.

COMMUNITY FACILITIES ELEMENT

Planning Department, City and County of San Francisco
1988

Relationship to Transbay Area Plan: The Community Facilities Element outlines policies for public facilities in the study area, including police services and neighborhood centers.

Summary: The Community Facilities Element outlines plans and policies for Police, Fire, Neighborhood Center, Library, Public Health, Educational, Institutional, Wastewater, and Solid Waste facilities in San Francisco. It includes locational criteria based on neighborhood needs, as well as policies concerning the relationship between the provision of adequate public services and the quality of life in the City.

Findings: The following objectives and policies are applicable to the Transbay Area Plan:

Objective 1: Distribute, locate, and design police facilities in a manner that will enhance the effective, efficient and responsive performance of police functions.

Policy 7: Combine police facilities with other public uses whenever multi-use facilities support planning goals, fulfill neighborhood needs, and meet police service needs.

Objective 3: Assure that neighborhood residents have access to needed services and a focus for neighborhood activities.

Policy 1: Provide neighborhood centers in areas lacking adequate community facilities.

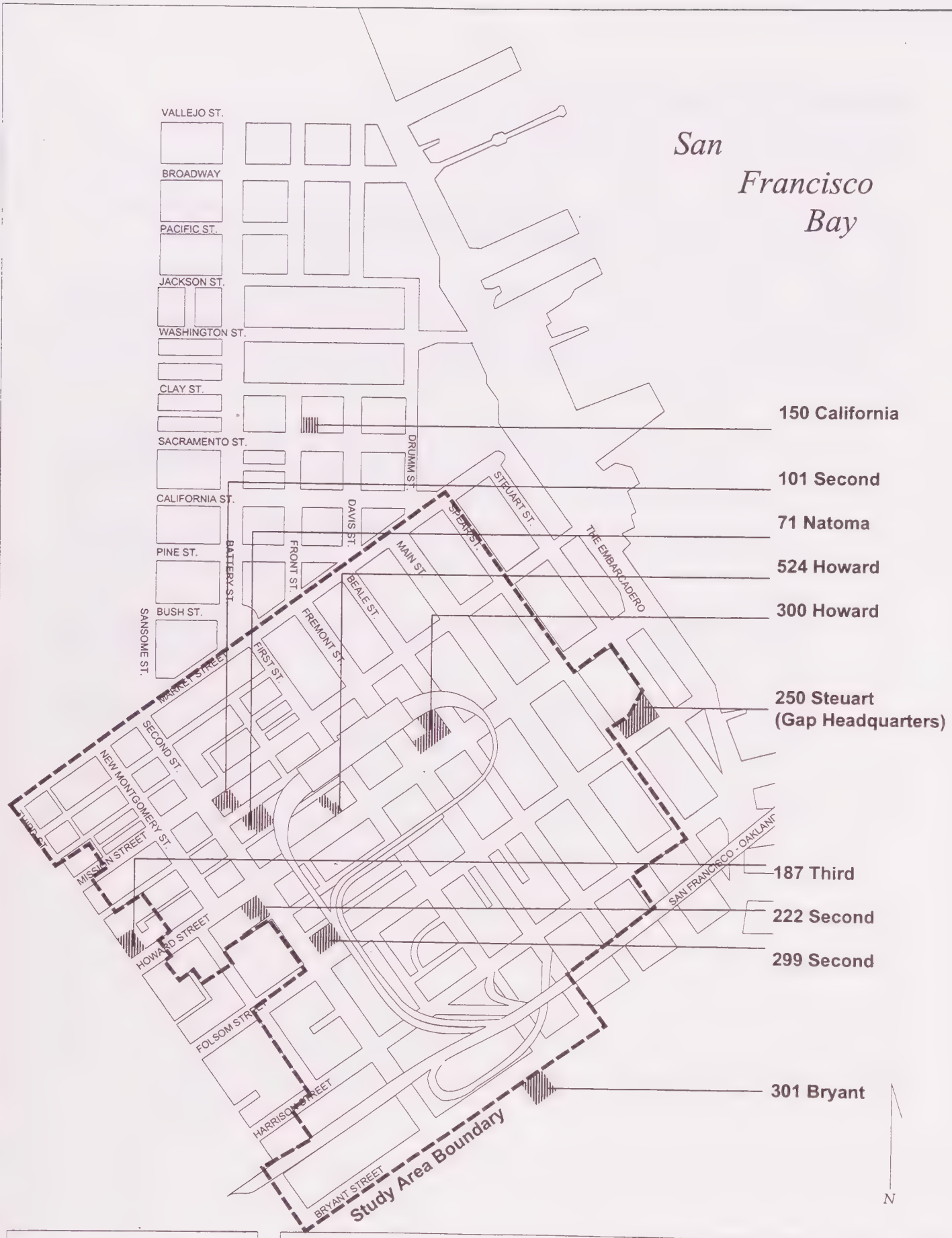
Policy 4: Locate neighborhood center so they are easily accessible and near the natural center of activity.

Policy 5: Develop neighborhood centers that are multi-purpose in character, attractive in design, secure and comfortable, and inherently flexible in meeting the current and changing needs of the neighborhood served.

Policy 7: Program the centers to fill gaps in needed services, and provide adequate facilities for ill-housed existing services.

Objective 4: Provide neighborhood centers that are responsive to the community served.

Policy 1: Assure effective neighborhood participation in the initial planning, ongoing programming, and activities of multi-purpose neighborhood centers.



San Francisco Planning Department

Transbay Area Plan and Implementation Program

APPROVED/PROPOSED DEVELOPMENT

Figure 19

Diagram not to scale

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C. APPROVED/PROPOSED DEVELOPMENT

The Transbay Area Plan study is within the emerging south of Market District, an area which is currently undergoing a transformation into a vital mixed-use business, entertainment and residential community. The many converted warehouses in the area are home to San Francisco's dynamic multi-media development community in "Multi-Media Gulch" near the base of the Bridge and a diverse group of designers and artists. The number of galleries and artists in the area is sure to expand given the museums and cultural centers in the Yerba Buena Center area.

There is a considerable amount of infill and conversion construction in the area including live-work lofts and offices for design professionals. In addition, a number of larger projects have been approved within and adjacent to the study area (see Figure 19):

101 Second--370,000 s.f. office space (425'/32 stories)
222 Second--220,000 s.f. office space (225'/15 stories)
299 Second--260,000 s.f. office space (239'/17 stories)
300 Howard--385,000 s.f. office space (350'/28 stories)
524 Howard--200,000 s.f. office space (311'/23 stories)
71 Natoma--509 Residential units w/20,000 s.f. retail (475'/49 stories)
250 Steuart--440,000 s.f. office space (260'/17 stories)

150 California--195,000 s.f. office space (313'/25 stories)
255 King--363,000 s.f. office space (110'/8 stories)
187 Third--340 Room Hotel (22 stories)
301 Bryant--28 residential units w/400 s.f. retail (120'/11 stories)

III. EMPLOYMENT AND TRAVEL PATTERNS

A. EMPLOYMENT

Current employment data included in this report (Table 13) is derived from the 1990 Census, Journey-to-Work file. This file details employees by location of employment, residence, and means of travel to work. Geographically, this data is based on census travel analysis zones (CTAZs) which closely correspond to census block groups. These characteristics were examined for people who work in San Francisco on the basis of four sub-regions of residence throughout the Bay Area, and seven sub-areas of workplace locations within the city. The four sub-regions of residence were: San Francisco, East Bay including Alameda, Contra Costa, and Solano counties, South Bay including San Mateo, and Santa Clara counties, and North Bay including Marin, Napa, and Sonoma counties. The sub-areas defined within the city were: the downtown C-3 zoning area, sub-divided into areas basically east and west of Kearny, and Third streets, superdistrict 1 north and south of the downtown areas, and superdistricts 2, 3, and 4, except for the small portions of these districts which fall within the downtown area.

The major findings from this analysis were that the largest group of San Francisco employees also live in San Francisco, and that this group has the highest transit mode share. Overall, autos dominated as the means of travel to work in San Francisco, 55 percent to 45 percent for transit. However, this varied widely depending on area of residence and employment. People who worked in the downtown area, regardless of location of residence, had transit mode shares higher than 50 percent. People working in the eastern sub-area of the downtown core had a transit mode share of over 58 percent, and those working in the western sub-area of the downtown core had a transit share of about 51 percent. Commuters from the East Bay had the highest transit mode share, and comprised the largest group of non-San Francisco residents who worked in the city. East Bay residents who worked in the eastern sub-area of downtown had a transit mode share of nearly 60 percent. North Bay residents made up the smallest group of workers in this area, but had a higher transit share than South Bay workers, 48 percent to 39 percent.

Projected employment data included in this report is derived from the Association of Bay Area Government's (ABAG) Projections '94. Because of the different sources, data for 1990 in this file is slightly different from the Census Journey-to-Work file. Moreover, this data is grouped at the Regional Travel Analysis Zone (RTAZ) level (700 zone system), whereas the Census data is grouped at the Census Travel Analysis Zone (CTAZ) level. These two boundary systems are nearly identical for San Francisco, but do have some minor differences. Thus, the sub-areas defined by RTAZs shown in Figure 20 are slightly different than those defined by CTAZs and used for analysis of 1990 Census data.

The major findings from analysis of these projections are that a significant increase in employment, more than 50 percent, is expected in the area immediately south of Harrison Street, and north of Townsend street in the South of Market area (superdistrict 1 South) between 1990 and 2010. Most of this increase is expected to occur after the year 2000. Employment is also projected to increase significantly, by about one-third, in superdistrict 3, which covers the area east of Twin Peaks and south of Townsend street to the County line, by the year 2010. As of 1990, the C-3 sub-area

contained about 46 percent of all employment citywide. It is expected that by 2010, this area will contain about 44 percent of citywide employment. The share of citywide employment contained in superdistrict 3 is projected to increase by about 3 percent, from 21 percent to over 24 percent, while the citywide share of employment is expected to decrease slightly in the area north of the C-3 sub-area and in superdistrict 2.

It should be noted that ABAG projections assume gradual in-fill development in the vicinity of the Transbay Transit Terminal, but do not assume any upgrade to the Terminal or any extension of the CalTrain line. Clustering of development near the terminal may increase with an upgraded Transit Terminal and development of a land use plan for the area. As part of this study, our economic consultant will be examining these issues and providing revised development and employment projections.

TABLE 13 - 1990 EMPLOYMENT by WORKPLACE LOCATION, ORIGIN, and MODE

EMPLOYMENT AREA	RESIDENCE REGION	TOTAL WORKERS	% OF TOTAL EMPLOYED	TRANSIT COMMUTERS	% TRANSIT	AUTO COMMUTERS	% AUTO	RIDE SHARE COMMUTERS	% RIDE SHARE
C-3 East	East Bay	42,553	31.4%	25,380	59.6%	12,936	30.4%	4,237	10.0%
C-3 East	North Bay	13,687	10.1%	6,521	47.6%	5,558	40.6%	1,608	11.7%
C-3 East	South Bay	20,708	15.3%	8,047	38.9%	10,744	51.9%	1,917	9.3%
C-3 East	San Francisco	58,641	43.2%	38,822	66.2%	18,007	30.7%	1,812	3.1%
AREA TOTAL		**135,589**	**25.0%**	**78,770**	**58.1%**	**47,245**	**34.8%**	**9,574**	**7.1%**
C-3 West	East Bay	26,997	22.9%	13,642	50.5%	9,717	36.0%	3,638	13.5%
C-3 West	North Bay	8,419	7.1%	2,765	32.8%	4,414	52.4%	1,240	14.7%
C-3 West	South Bay	17,111	14.5%	5,006	29.3%	10,053	58.8%	2,052	12.0%
C-3 West	San Francisco	65,336	55.4%	39,436	60.4%	22,446	34.4%	3,454	5.3%
AREA TOTAL		**117,863**	**21.8%**	**60,849**	**51.6%**	**46,630**	**39.6%**	**10,384**	**8.8%**
Sup. Dist. 1 North	East Bay	10,343	17.9%	3,876	37.5%	4,610	44.6%	1,857	18.0%
Sup. Dist. 1 North	North Bay	4,969	8.6%	1,225	24.7%	2,855	57.5%	889	17.9%
Sup. Dist. 1 North	South Bay	7,293	12.6%	1,543	21.2%	4,836	66.3%	914	12.5%
Sup. Dist. 1 North	San Francisco	35,162	60.9%	21,088	60.0%	11,673	33.2%	2,405	6.8%
AREA TOTAL		**57,767**	**10.7%**	**27,732**	**48.0%**	**23,974**	**41.5%**	**6,065**	**10.5%**
Sup. Dist. 1 South	East Bay	3,915	20.9%	1,091	27.9%	2,100	53.6%	724	18.5%
Sup. Dist. 1 South	North Bay	1,600	8.5%	260	16.3%	1,068	66.8%	272	17.0%
Sup. Dist. 1 South	South Bay	3,706	19.8%	731	19.7%	2,515	67.9%	460	12.4%
Sup. Dist. 1 South	San Francisco	9,525	50.8%	4,112	43.2%	4,813	50.5%	600	6.3%
AREA TOTAL		**18,746**	**3.5%**	**6,194**	**33.0%**	**10,496**	**56.0%**	**2,056**	**11.0%**
Sup. Dist. 2	East Bay	11,651	15.4%	3,059	26.3%	6,198	53.2%	2,394	20.5%
Sup. Dist. 2	North Bay	6,464	8.6%	841	13.0%	4,261	65.9%	1,362	21.1%
Sup. Dist. 2	South Bay	9,756	12.9%	1,213	12.4%	6,925	71.0%	1,618	16.6%
Sup. Dist. 2	San Francisco	47,662	63.1%	22,584	47.4%	20,837	43.7%	4,241	8.9%
AREA TOTAL		**75,533**	**14.0%**	**27,697**	**36.7%**	**38,221**	**50.6%**	**9,615**	**12.7%**
Sup. Dist. 3	East Bay	19,632	17.6%	4,742	24.2%	10,970	55.9%	3,920	20.0%
Sup. Dist. 3	North Bay	6,492	5.8%	752	11.6%	4,318	66.5%	1,422	21.9%
Sup. Dist. 3	South Bay	23,747	21.3%	2,536	10.7%	17,890	75.3%	3,321	14.0%
Sup. Dist. 3	San Francisco	61,375	55.2%	26,222	42.7%	29,723	48.4%	5,430	8.8%
AREA TOTAL		**111,246**	**20.6%**	**34,252**	**30.8%**	**62,901**	**56.5%**	**14,093**	**12.7%**
Sup. Dist. 4	East Bay	3,357	13.7%	1,064	31.7%	1,720	51.2%	573	17.1%
Sup. Dist. 4	North Bay	1,604	6.5%	239	14.9%	1,105	68.9%	260	16.2%
Sup. Dist. 4	South Bay	4,483	18.3%	372	8.3%	3,542	79.0%	569	12.7%
Sup. Dist. 4	San Francisco	15,118	61.6%	6,159	40.7%	7,663	50.7%	1,296	8.6%
AREA TOTAL		**24,562**	**4.5%**	**7,834**	**31.9%**	**14,030**	**57.1%**	**2,698**	**11.0%**
ALL SAN FRANCISCO	East Bay	118,448	21.9%	52,854	44.6%	48,251	40.7%	17,343	14.6%
ALL SAN FRANCISCO	North Bay	43,235	8.0%	12,603	29.1%	23,579	54.5%	7,053	16.3%
ALL SAN FRANCISCO	South Bay	86,804	16.0%	19,448	22.4%	56,505	65.1%	10,851	12.5%
ALL SAN FRANCISCO	San Francisco	292,819	54.1%	158,423	54.1%	115,162	39.3%	19,238	6.6%
GRAND TOTAL		**541,306**	**100%**	**243,328**	**45.0%**	**243,497**	**45.0%**	**54,485**	**10.1%**

Source: 1990 Census, Journey-to-Work File, Part 3. Prepared by San Francisco Planning Department, February, 1995.

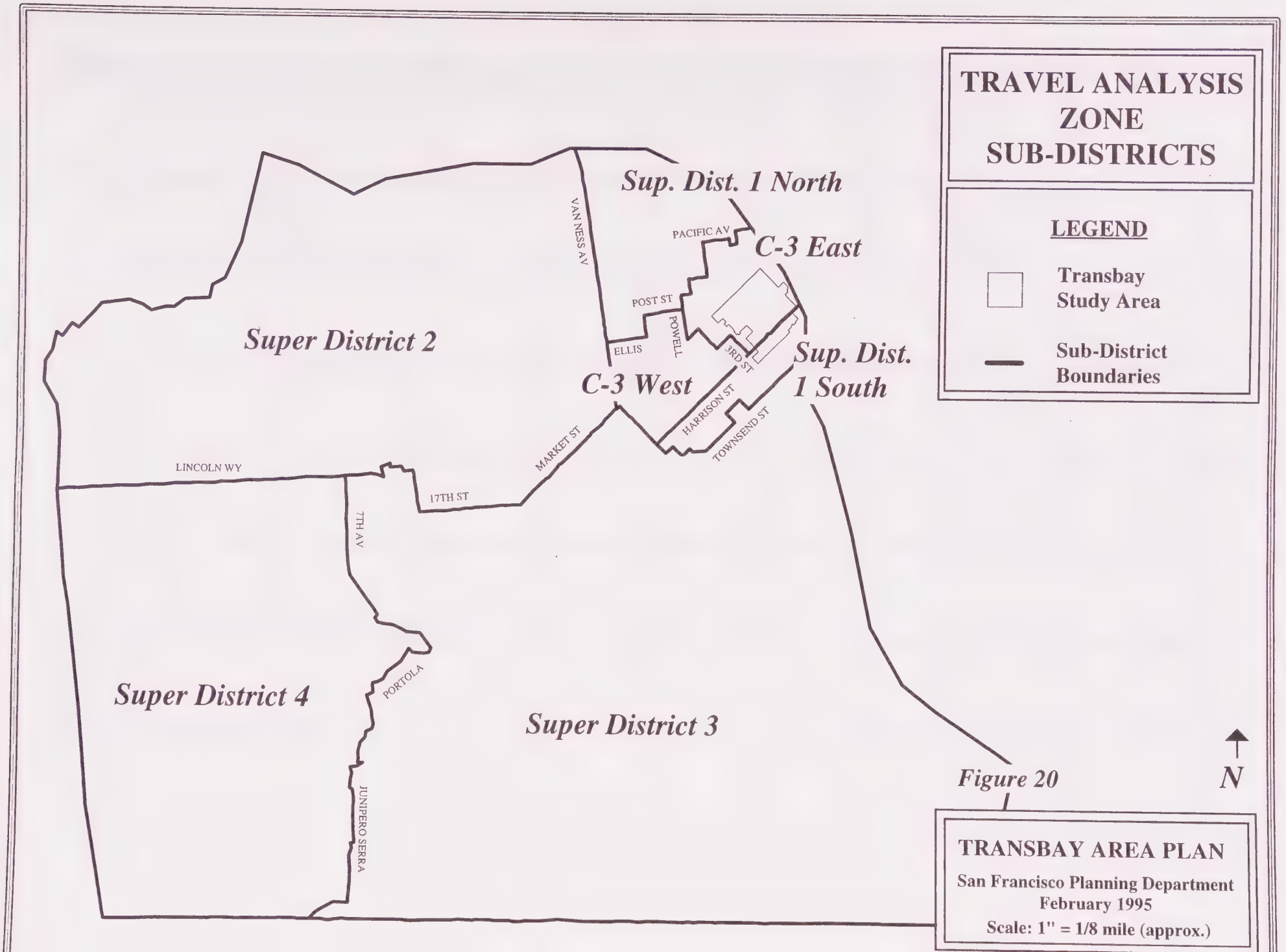

TRAVEL ANALYSIS ZONE SUB-DISTRICTS
LEGEND
Transbay Study Area
Sub-District Boundaries
Sup. Dist. 1 North
C-3 East
C-3 West
Sup. Dist. 1 South
Super District 2
Super District 3
Super District 4
VAN NESS AV
PACIFIC AV
POST ST
POWELL
ELLIS
3RD ST
HARRISON ST
TOWNSEND ST
MARKET ST
LINCOLN WY
17TH ST
7TH AV
PORTOLA
JUNIPERO SERRA
N
Figure 20
TRANSBAY AREA PLAN
San Francisco Planning Department
February 1995
Scale: 1" = 1/8 mile (approx.)

TABLE 14 - CHANGES IN EMPLOYMENT by WORKPLACE LOCATION

WORKPLACE LOCATION	1990 EMPLOYMENT	% OF TOTAL	2000 EMPLOYMENT	% OF TOTAL	2010 EMPLOYMENT	% OF TOTAL	% CHANGE 1990 TO 2000	1990 TO 2010	2000 TO 2010
C-3 EAST	200,685	35.4%	197,230	33.9%	214,351	32.7%	-1.7%	6.8%	8.7%
C-3 WEST	62,176	11.0%	63,506	10.9%	75,059	11.4%	2.1%	20.7%	18.2%
SUP. DIST. 1 NORTH	62,931	11.1%	64,168	11.0%	66,295	10.1%	2.0%	5.3%	3.3%
SUP. DIST. 1 SOUTH	18,999	3.4%	22,078	3.8%	29,218	4.5%	16.2%	53.8%	32.3%
SUPER DISTRICT 2	77,146	13.6%	75,891	13.0%	82,533	12.6%	-1.6%	7.0%	8.8%
SUPER DISTRICT 3	121,190	21.4%	133,915	23.0%	161,605	24.6%	10.5%	33.3%	20.7%
SUPER DISTRICT 4	23,521	4.2%	25,758	4.4%	26,661	4.1%	9.5%	13.3%	3.5%
SAN FRANCISCO TOTAL	**566,648**	**100.0%**	**582,546**	**100.0%**	**655,722**	**100.0%**	**2.8%**	**15.7%**	**12.6%**

Source: Association of Bay Area Governments, Projections 94. Prepared by San Francisco Planning Department, February, 1995.

TABLE 15 - CHANGES IN EMPLOYMENT by WORKPLACE TAZ IN STUDY AREA VICINITY

TAZ	1990 EMPLOYMENT	% of SUB-AREA	2000 EMPLOYMENT	% of SUB-AREA	2010 EMPLOYMENT	% of SUB-AREA	% CHANGE 1990 to 2000	% CHANGE 1990 to 2010	% CHANGE 2000 to 2010
382	14,718	5.3%	15,922	5.7%	22,595	7.1%	8.2%	53.5%	41.9%
421	45,511	16.2%	44,823	16.0%	47,178	14.9%	-1.5%	3.7%	5.3%
422	40,037	14.3%	38,864	13.8%	40,370	12.8%	-2.9%	0.8%	3.9%
427	30,441	10.9%	29,334	10.4%	32,038	10.1%	-3.6%	5.2%	9.2%
428	36,681	13.1%	35,139	12.5%	37,782	11.9%	-4.2%	3.0%	7.5%
429	17,655	6.3%	16,660	5.9%	17,116	5.4%	-5.6%	-3.1%	2.7%
430	13,906	5.0%	14,457	5.1%	15,004	4.7%	4.0%	7.9%	3.8%
659	7,795	2.8%	9,189	3.3%	13,083	4.1%	17.9%	67.8%	42.4%
383	5,726	2.0%	6,339	2.3%	7,719	2.4%	10.7%	34.8%	21.8%
423	12,712	4.5%	14,735	5.2%	17,084	5.4%	15.9%	34.4%	15.9%
424	13,783	4.9%	9,590	3.4%	10,286	3.3%	-30.4%	-25.4%	7.3%
425	13,001	4.6%	13,871	4.9%	14,457	4.6%	6.7%	11.2%	4.2%
426	11,180	4.0%	12,364	4.4%	13,003	4.1%	10.6%	16.3%	5.2%
548	6,687	2.4%	7,519	2.7%	11,667	3.7%	12.4%	74.5%	55.2%
660	5,478	2.0%	6,550	2.3%	8,416	2.7%	19.6%	53.6%	28.5%
661	4,813	1.7%	5,427	1.9%	8,562	2.7%	12.8%	77.9%	57.8%
GRAND TOTAL	280,124	100%	280,783	100%	316,360	100%	0.2%	12.9%	12.7%

Source: Association of Bay Area Governments, Projections 94. Prepared by San Francisco Planning Department, February, 1995.

NOTE: REFER TO FIGURE 31 FOR LOCATION OF TAZs

B. EXISTING AND PROJECTED TRAVEL DATA

Data in this section were gathered from the Metropolitan Transportation Commission's (MTC) Daily Person Trip Projections and were analyzed for the years 1990 and 2010. The data is for trips to work in San Francisco, and is aggregated into seven sub-districts within San Francisco, based on the 700 zone system of Regional Travel Analysis Zones (RTAZs). These sub-districts are shown in Figure 20.

Major findings from this analysis, for both 1990 and 2010 are that the majority of work trips to San Francisco originate from within San Francisco. This is particularly true of transit trips, but applies for all modes of travel. Trips originating in San Francisco account for over 61 percent of all work trips by transit to the city in 1990. By 2010 it is projected that this figure will fall slightly to about 57 percent. For all modes, trips originating in San Francisco accounted for nearly 57 percent of work trips to the city, while for 2010 this figure is also projected to decline somewhat to about 53 percent.

The East Bay is the next largest contributor of work trips to San Francisco, both in 1990 and in 2010, and for transit and ride share, but not for auto. About 52 percent of all work trips from the East Bay were by transit for 1990, and for 2010, this is projected to increase to about 56 percent. Ride share trips comprised a significant portion of trips from the East Bay in 1990, and this is projected to increase substantially by 2010.

For work trips by auto to San Francisco, the South Bay is the largest contributor outside of San Francisco, both in 1990 and in 2010. Of all work trips to San Francisco from the South Bay, auto accounts for about 53 percent in 1990, and about 50 percent in 2010.

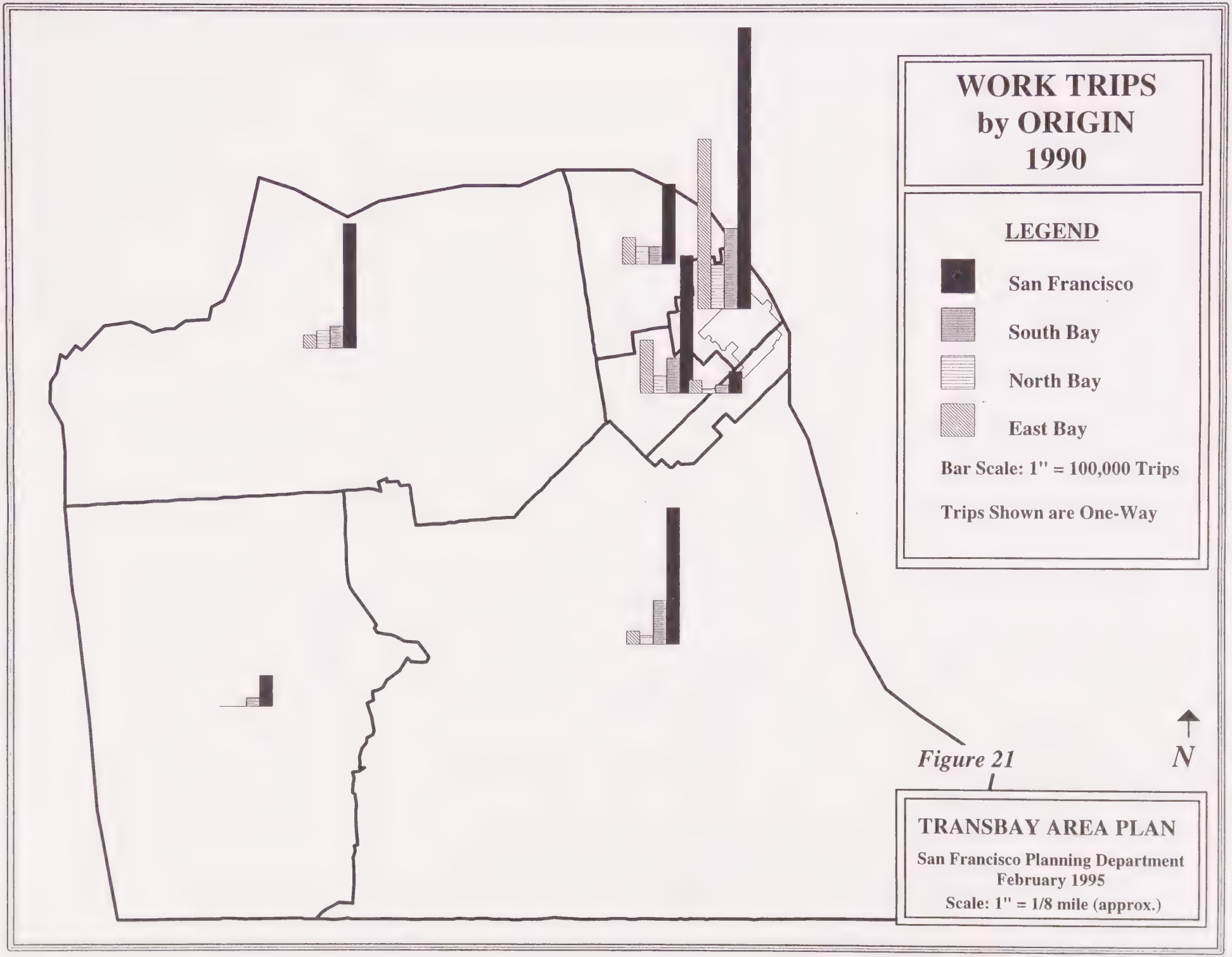
The number of work trips from San Francisco to adjacent communities is a small percentage of overall trips in the city. In 1990, 20.9 percent of San Francisco work trips (105,687) were to adjacent areas and most of these trips were by auto. Approximately 66 percent of East Bay trips were drive alone, 71 percent to the North Bay, and 77 percent to the South Bay. The 2010 projections indicate that the percentage of work trips to adjacent areas will decrease to 18.6 percent of the San Francisco work trips (102,358) with 56 percent of East Bay, 75 percent of North Bay, and 60 percent of South Bay trips being drive alone.

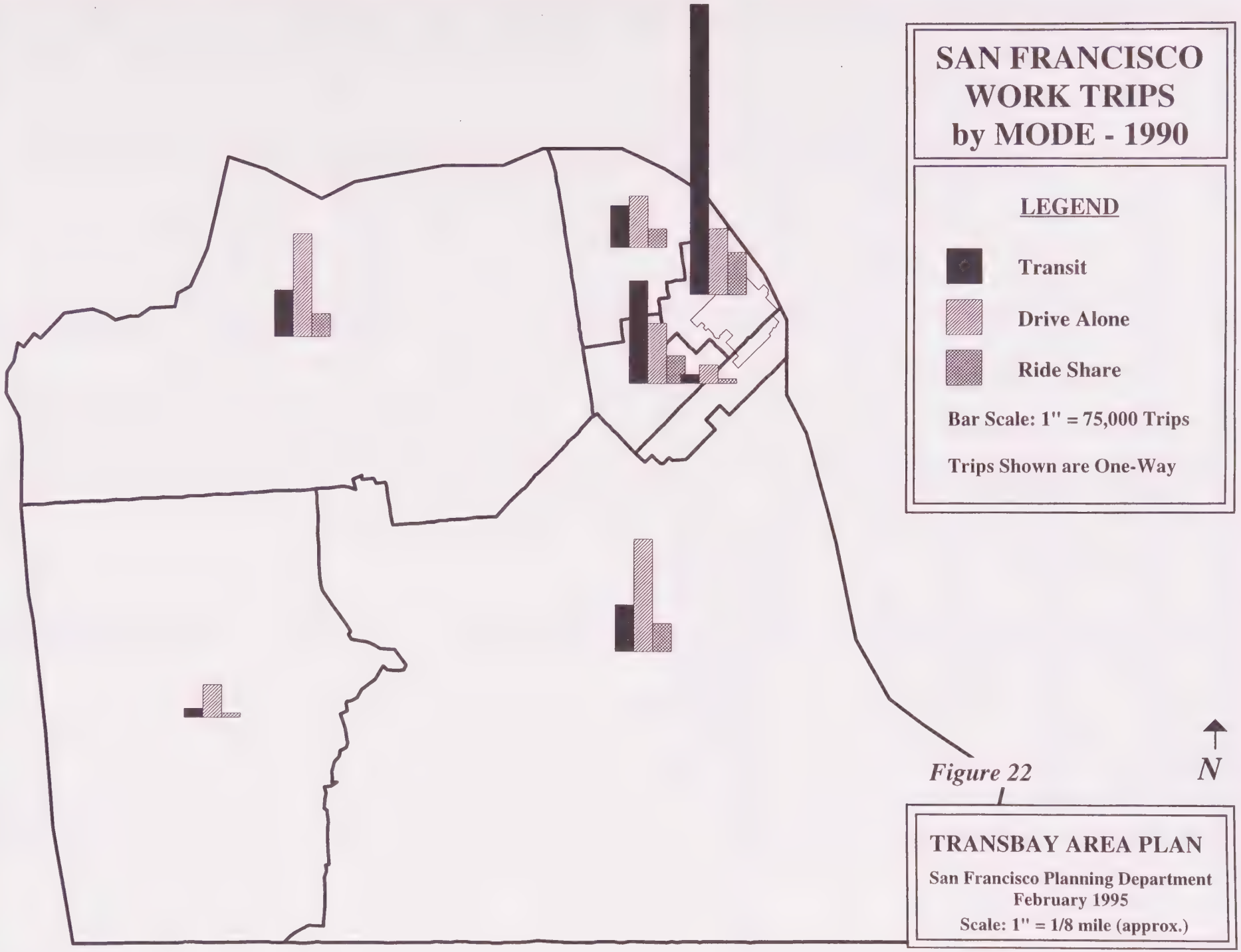
TABLE 16 - PROJECTED 1990 ONE-WAY DAILY PERSON WORK TRIPS TO SAN FRANCISCO, by ORIGIN and MODE

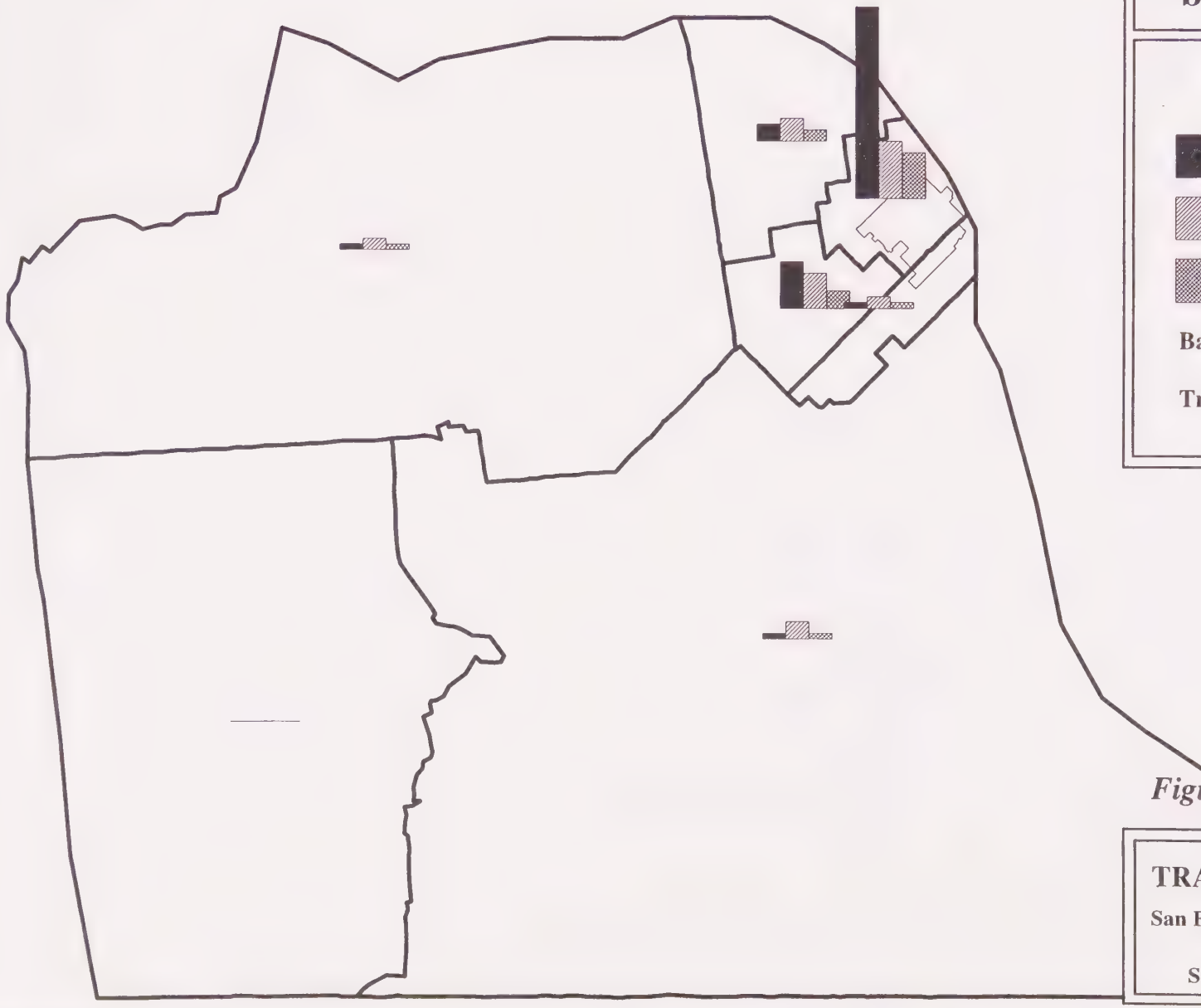
TRIP ORIGIN	DESTINATION SUB-AREA	TRANSIT	% OF ALL ORIGINS	% OF ALL MODES	AUTO	% OF ALL ORIGINS	% OF ALL MODES	RIDE SHARE	% OF ALL ORIGINS	% OF ALL MODES	ALL MODES	% OF ALL ORIGINS
SAN FRANCISCO	C -3 WEST	35,806	11.7%	54.8%	20,671	7.6%	31.6%	8,863	8.1%	13.6%	65,340	9.5%
	C-3 EAST	98,250	32.1%	72.9%	22,658	8.3%	16.8%	13,798	12.6%	10.2%	134,706	19.6%
	SUP. DIST. 1 NORTH	14,169	4.6%	37.9%	16,760	6.2%	44.9%	6,426	5.9%	17.2%	37,355	5.4%
	SUP. DIST. 1 SOUTH	2,954	1.0%	25.6%	6,309	2.3%	54.8%	2,258	2.1%	19.6%	11,521	1.7%
	SUP. DIST. 2	16,702	5.5%	27.8%	35,704	13.1%	59.4%	7,714	7.1%	12.8%	60,120	8.7%
	SUP. DIST. 3	16,585	5.4%	25.4%	38,790	14.2%	59.4%	9,903	9.1%	15.2%	65,278	9.5%
	SUP. DIST. 4	2,875	0.9%	18.1%	10,594	3.9%	66.8%	2,384	2.2%	15.0%	15,853	2.3%
SUB-TOTAL		187,341	61.3%	48.0%	151,486	55.6%	38.8%	51,346	47.1%	13.2%	390,173	56.8%
EAST BAY	C -3 WEST	12,216	4.0%	46.2%	9,036	3.3%	34.2%	5,178	4.7%	19.6%	26,430	3.8%
	C-3 EAST	52,750	17.3%	65.2%	15,626	5.7%	19.3%	12,571	11.5%	15.5%	80,947	11.8%
	SUP. DIST. 1 NORTH	4,189	1.4%	30.7%	5,890	2.2%	43.2%	3,546	3.3%	26.0%	13,625	2.0%
	SUP. DIST. 1 SOUTH	901	0.3%	16.4%	3,040	1.1%	55.4%	1,546	1.4%	28.2%	5,487	0.8%
	SUP. DIST. 2	1,466	0.5%	23.5%	3,396	1.2%	54.4%	1,386	1.3%	22.2%	6,248	0.9%
	SUP. DIST. 3	1,576	0.5%	22.0%	4,129	1.5%	57.5%	1,470	1.3%	20.5%	7,175	1.0%
	SUP. DIST. 4	197	0.1%	19.2%	582	0.2%	56.6%	249	0.2%	24.2%	1,028	0.1%
SUB-TOTAL		73,295	24.0%	52.0%	41,699	15.3%	29.6%	25,946	23.8%	18.4%	140,940	20.5%
SOUTH BAY	C -3 WEST	4,670	1.5%	27.9%	8,779	3.2%	52.5%	3,287	3.0%	19.6%	16,736	2.4%
	C-3 EAST	18,276	6.0%	48.4%	12,971	4.8%	34.4%	6,501	6.0%	17.2%	37,748	5.5%
	SUP. DIST. 1 NORTH	1,648	0.5%	18.1%	5,387	2.0%	59.1%	2,081	1.9%	22.8%	9,116	1.3%
	SUP. DIST. 1 SOUTH	548	0.2%	12.1%	3,013	1.1%	66.5%	972	0.9%	21.4%	4,533	0.7%
	SUP. DIST. 2	778	0.3%	7.3%	7,316	2.7%	68.8%	2,542	2.3%	23.9%	10,636	1.5%
	SUP. DIST. 3	2,038	0.7%	9.2%	15,103	5.5%	68.3%	4,970	4.6%	22.5%	22,111	3.2%
	SUP. DIST. 4	165	0.1%	4.1%	2,976	1.1%	73.5%	909	0.8%	22.4%	4,050	0.6%
SUB-TOTAL		28,123	9.2%	26.8%	55,545	20.4%	52.9%	21,262	19.5%	20.3%	104,930	15.3%
NORTH BAY	C -3 WEST	2,726	0.9%	32.3%	3,987	1.5%	47.3%	1,724	1.6%	20.4%	8,437	1.2%
	C-3 EAST	10,150	3.3%	49.9%	6,339	2.3%	31.2%	3,847	3.5%	18.9%	20,336	3.0%
	SUP. DIST. 1 NORTH	1,999	0.7%	23.4%	4,656	1.7%	54.5%	1,885	1.7%	22.1%	8,540	1.2%
	SUP. DIST. 1 SOUTH	196	0.1%	10.6%	1,157	0.4%	62.6%	494	0.5%	26.7%	1,847	0.3%
	SUP. DIST. 2	1,142	0.4%	14.5%	5,088	1.9%	64.6%	1,647	1.5%	20.9%	7,877	1.1%
	SUP. DIST. 3	669	0.2%	18.9%	2,055	0.8%	58.1%	810	0.7%	22.9%	3,534	0.5%
	SUP. DIST. 4	9	0.0%	1.7%	389	0.1%	73.5%	131	0.1%	24.8%	529	0.1%
SUB-TOTAL		16,891	5.5%	33.1%	23,671	8.7%	46.3%	10,538	9.7%	20.6%	51,100	7.4%
GRAND TOTAL		**305,650**	**100.0%**	**44.5%**	**272,401**	**100.0%**	**39.6%**	**109,092**	**100.0%**	**15.9%**	**687,143**	**100.0%**

NOTE: % of All Origins refers to column totals (reading down), while % of All Modes refers to row totals (reading across).

Source: MTC Daily One-Way Person Trip Projections. Prepared by San Francisco Planning Department, February, 1995.


WORK TRIPS
by ORIGIN
1990
LEGEND
San Francisco
South Bay
North Bay
East Bay
Bar Scale: 1" = 100,000 Trips
Trips Shown are One-Way
N
Figure 21
TRANSBAY AREA PLAN
San Francisco Planning Department
February 1995
Scale: 1" = 1/8 mile (approx.)


SAN FRANCISCO
WORK TRIPS
by MODE - 1990
LEGEND
Transit
Drive Alone
Ride Share
Bar Scale: 1" = 75,000 Trips
Trips Shown are One-Way
N
Figure 22
TRANSBAY AREA PLAN
San Francisco Planning Department
February 1995
Scale: 1" = 1/8 mile (approx.)



EAST BAY WORK TRIPS by MODE - 1990

LEGEND

- Transit
- Drive Alone
- Ride Share

Bar Scale: 1" = 75,000 Trips

Trips Shown are One-Way

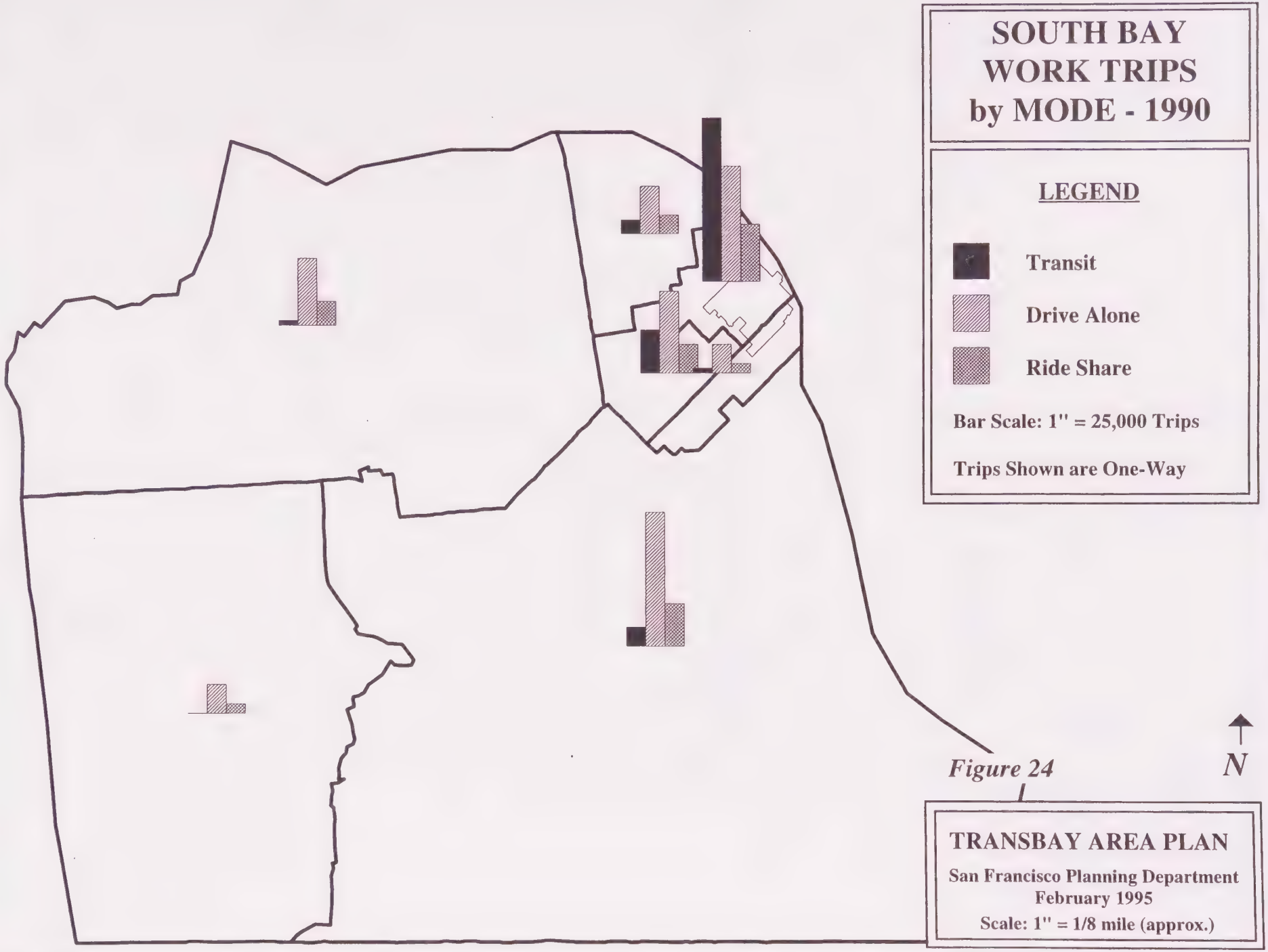
N

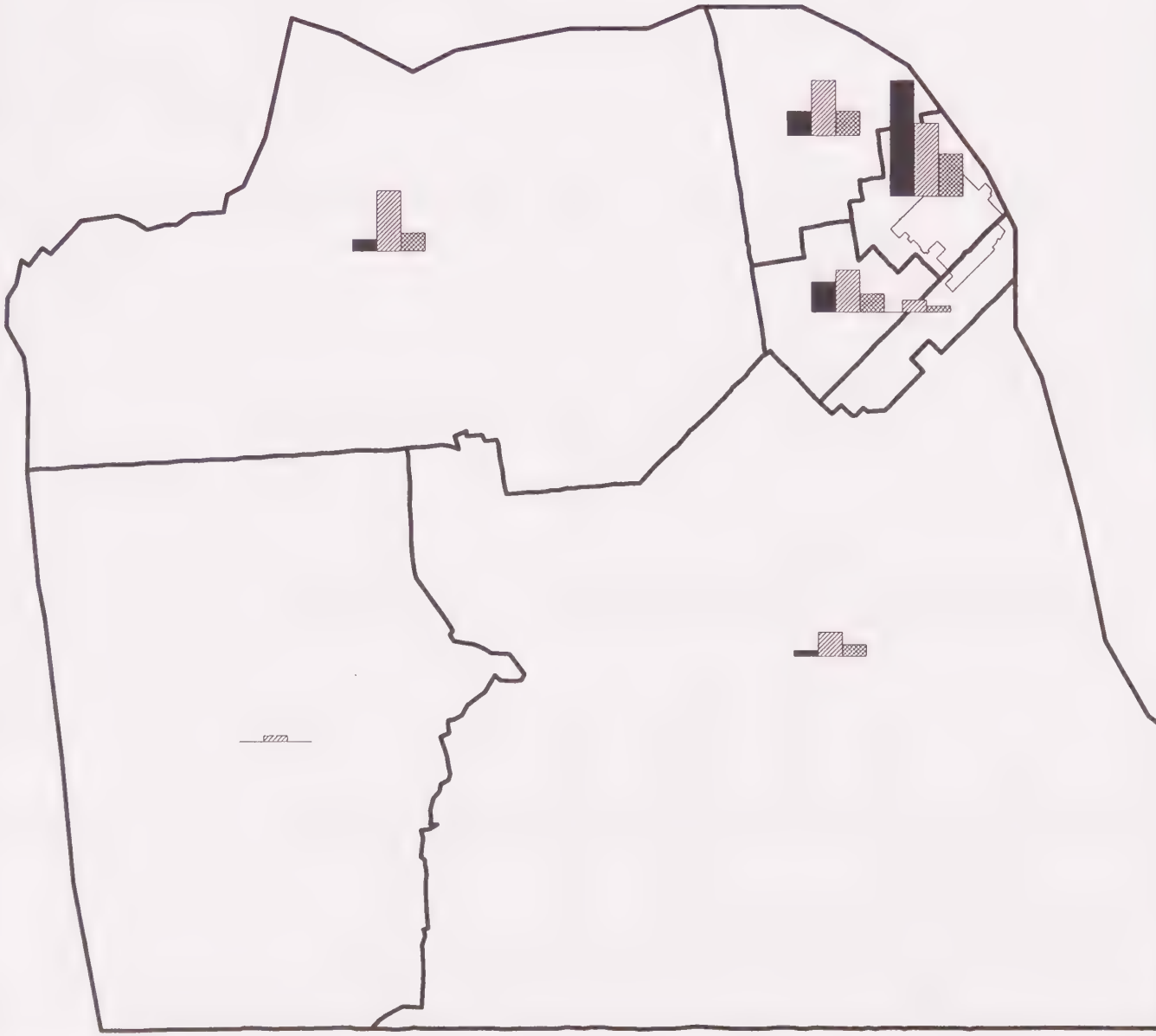
Figure 23

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995

Scale: 1" = 1/8 mile (approx.)


SOUTH BAY
WORK TRIPS
by MODE - 1990
LEGEND
Transit
Drive Alone
Ride Share
Bar Scale: 1" = 25,000 Trips
Trips Shown are One-Way
N
Figure 24
TRANSBAY AREA PLAN
San Francisco Planning Department
February 1995
Scale: 1" = 1/8 mile (approx.)



NORTH BAY WORK TRIPS by MODE - 1990

LEGEND

- Transit
- Drive Alone
- Ride Share

Bar Scale: 1" = 25,000 Trips

Trips Shown are One-Way

N

Figure 25

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995

Scale: 1" = 1/8 mile (approx.)

TABLE 17 - PROJECTED 2010 ONE-WAY DAILY PERSON WORK TRIPS TO SAN FRANCISCO, by ORIGIN and MODE

TRIP ORIGIN	DESTINATION SUB-AREA	TRANSIT	% OF ALL ORIGINS	% OF ALL MODES	AUTO	% OF ALL ORIGINS	% OF ALL MODES	RIDE SHARE	% OF ALL ORIGINS	% OF ALL MODES	ALL MODES	% OF ALL ORIGINS
	C -3 WEST	46,651	11.7%	61.7%	18,240	6.3%	24.1%	10,660	6.5%	14.1%	75,551	8.9%
	C-3 EAST	104,832	26.3%	81.3%	12,698	4.4%	9.8%	11,489	7.0%	8.9%	129,019	15.1%
	SUP. DIST. 1 NORTH	15,821	4.0%	39.6%	16,643	5.8%	41.7%	7,460	4.5%	18.7%	39,924	4.7%
SAN FRANCISCO	SUP. DIST. 1 SOUTH	5,357	1.3%	32.9%	7,462	2.6%	45.8%	3,482	2.1%	21.4%	16,301	1.9%
	SUP. DIST. 2	22,305	5.6%	31.8%	37,908	13.1%	54.1%	9,911	6.0%	14.1%	70,124	8.2%
	SUP. DIST. 3	29,833	7.5%	30.5%	51,705	17.9%	52.9%	16,180	9.8%	16.6%	97,718	11.5%
	SUP. DIST. 4	3,658	0.9%	18.7%	12,535	4.3%	64.2%	3,327	2.0%	17.0%	19,520	2.3%
SUB-TOTAL		228,457	57.3%	51.0%	157,191	54.4%	35.1%	62,509	38.0%	13.9%	448,157	52.6%
	C -3 WEST	22,562	5.7%	62.3%	5,313	1.8%	14.7%	8,339	5.1%	23.0%	36,214	4.2%
	C-3 EAST	67,206	16.9%	77.6%	5,604	1.9%	6.5%	13,791	8.4%	15.9%	86,601	10.2%
	SUP. DIST. 1 NORTH	8,244	2.1%	39.1%	5,235	1.8%	24.8%	7,589	4.6%	36.0%	21,068	2.5%
EAST BAY	SUP. DIST. 1 SOUTH	3,195	0.8%	33.2%	2,880	1.0%	29.9%	3,560	2.2%	36.9%	9,635	1.1%
	SUP. DIST. 2	4,005	1.0%	26.4%	5,459	1.9%	36.0%	5,705	3.5%	37.6%	15,169	1.8%
	SUP. DIST. 3	6,656	1.7%	23.1%	12,103	4.2%	42.0%	10,027	6.1%	34.8%	28,786	3.4%
	SUP. DIST. 4	408	0.1%	12.2%	1,688	0.6%	50.4%	1,250	0.8%	37.4%	3,346	0.4%
SUB-TOTAL		112,276	28.2%	55.9%	38,282	13.2%	19.1%	50,261	30.6%	25.0%	200,819	23.6%
	C -3 WEST	7,635	1.9%	38.1%	8,018	2.8%	40.0%	4,390	2.7%	21.9%	20,043	2.4%
	C-3 EAST	21,668	5.4%	61.3%	7,512	2.6%	21.2%	6,176	3.8%	17.5%	35,356	4.1%
	SUP. DIST. 1 NORTH	1,982	0.5%	17.7%	6,238	2.2%	55.8%	2,965	1.8%	26.5%	11,185	1.3%
SOUTH BAY	SUP. DIST. 1 SOUTH	791	0.2%	12.6%	3,819	1.3%	60.8%	1,667	1.0%	26.6%	6,277	0.7%
	SUP. DIST. 2	886	0.2%	6.0%	9,978	3.5%	67.6%	3,900	2.4%	26.4%	14,764	1.7%
	SUP. DIST. 3	3,256	0.8%	8.4%	25,498	8.8%	65.6%	10,097	6.1%	26.0%	38,851	4.6%
	SUP. DIST. 4	152	0.0%	2.3%	5,167	1.8%	77.7%	1,327	0.8%	20.0%	6,646	0.8%
SUB-TOTAL		36,370	9.1%	27.3%	66,230	22.9%	49.8%	30,522	18.6%	22.9%	133,122	15.6%
	C -3 WEST	3,966	1.0%	34.7%	3,927	1.4%	34.4%	3,539	2.2%	31.0%	11,432	1.3%
	C-3 EAST	13,480	3.4%	56.7%	4,314	1.5%	18.2%	5,974	3.6%	25.1%	23,768	2.8%
	SUP. DIST. 1 NORTH	2,097	0.5%	20.9%	4,680	1.6%	46.7%	3,255	2.0%	32.4%	10,032	1.2%
NORTH BAY	SUP. DIST. 1 SOUTH	355	0.1%	12.9%	1,363	0.5%	49.6%	1,032	0.6%	37.5%	2,750	0.3%
	SUP. DIST. 2	712	0.2%	7.0%	6,087	2.1%	59.8%	3,382	2.1%	33.2%	10,181	1.2%
	SUP. DIST. 3	1,026	0.3%	9.9%	5,799	2.0%	55.9%	3,541	2.2%	34.2%	10,366	1.2%
	SUP. DIST. 4	16	0.0%	1.0%	1,164	0.4%	74.2%	388	0.2%	24.7%	1,568	0.2%
SUB-TOTAL		21,652	5.4%	30.9%	27,334	9.5%	39.0%	21,111	12.8%	30.1%	70,097	8.2%
GRAND TOTAL		**398,755**	**100.0%**	**46.8%**	**289,037**	**100.0%**	**33.9%**	**164,403**	**100.0%**	**19.3%**	**852,195**	**100.0%**

NOTE: % of All Origins refers to column totals (reading down), while % of All Modes refers to row totals (reading across).

Source: MTC Daily One-Way Person Trip Projections. Prepared by San Francisco Planning Department, February, 1995.

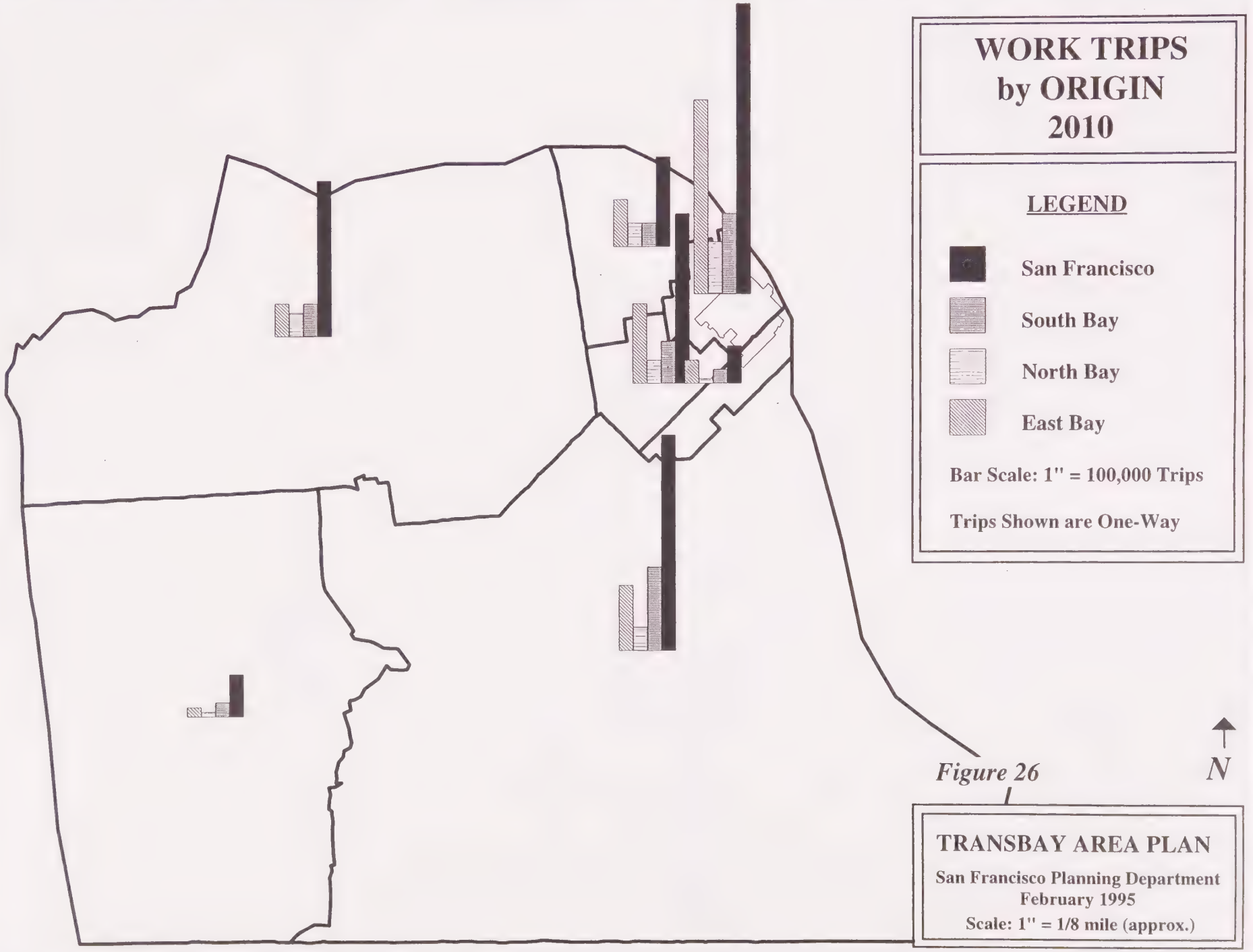
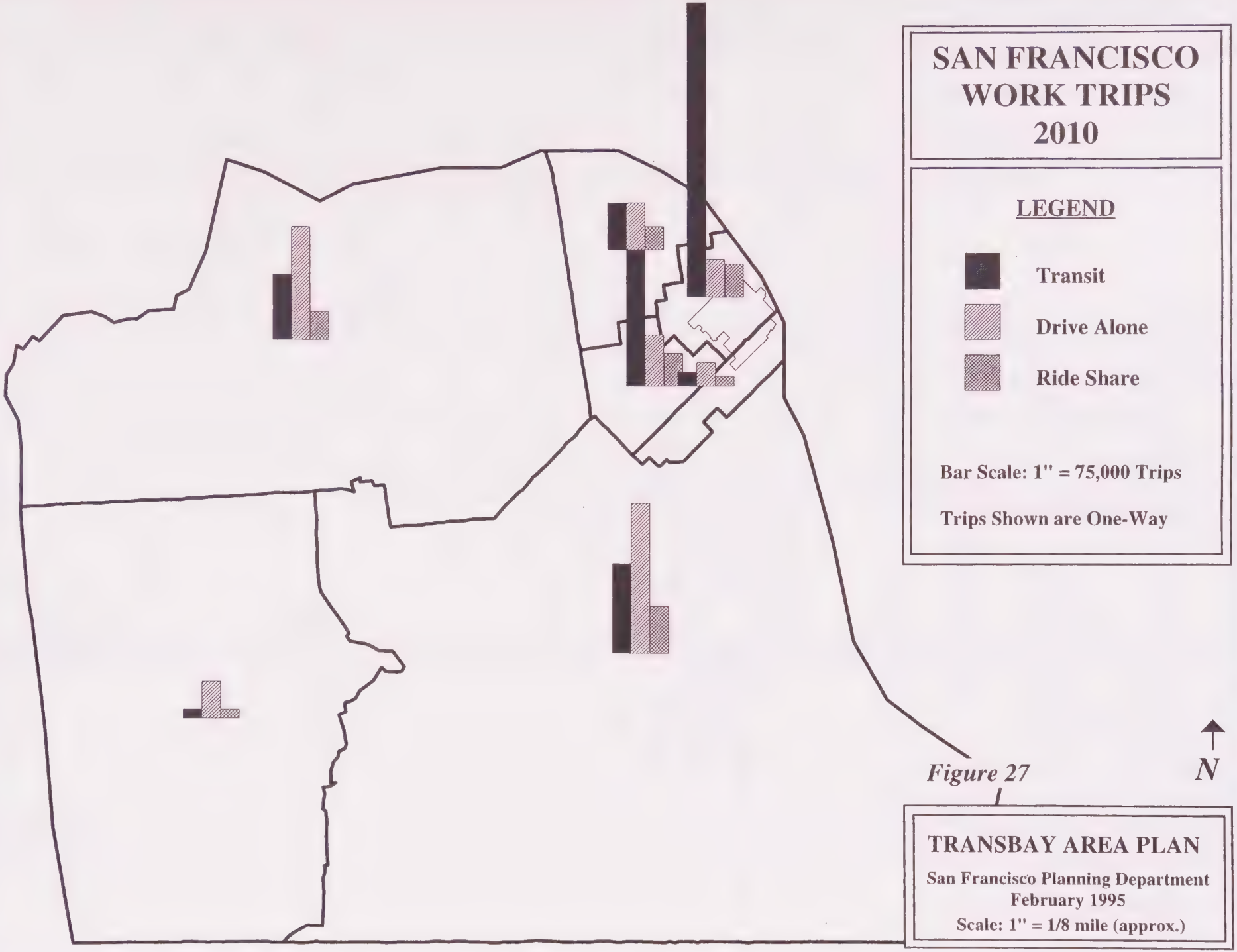
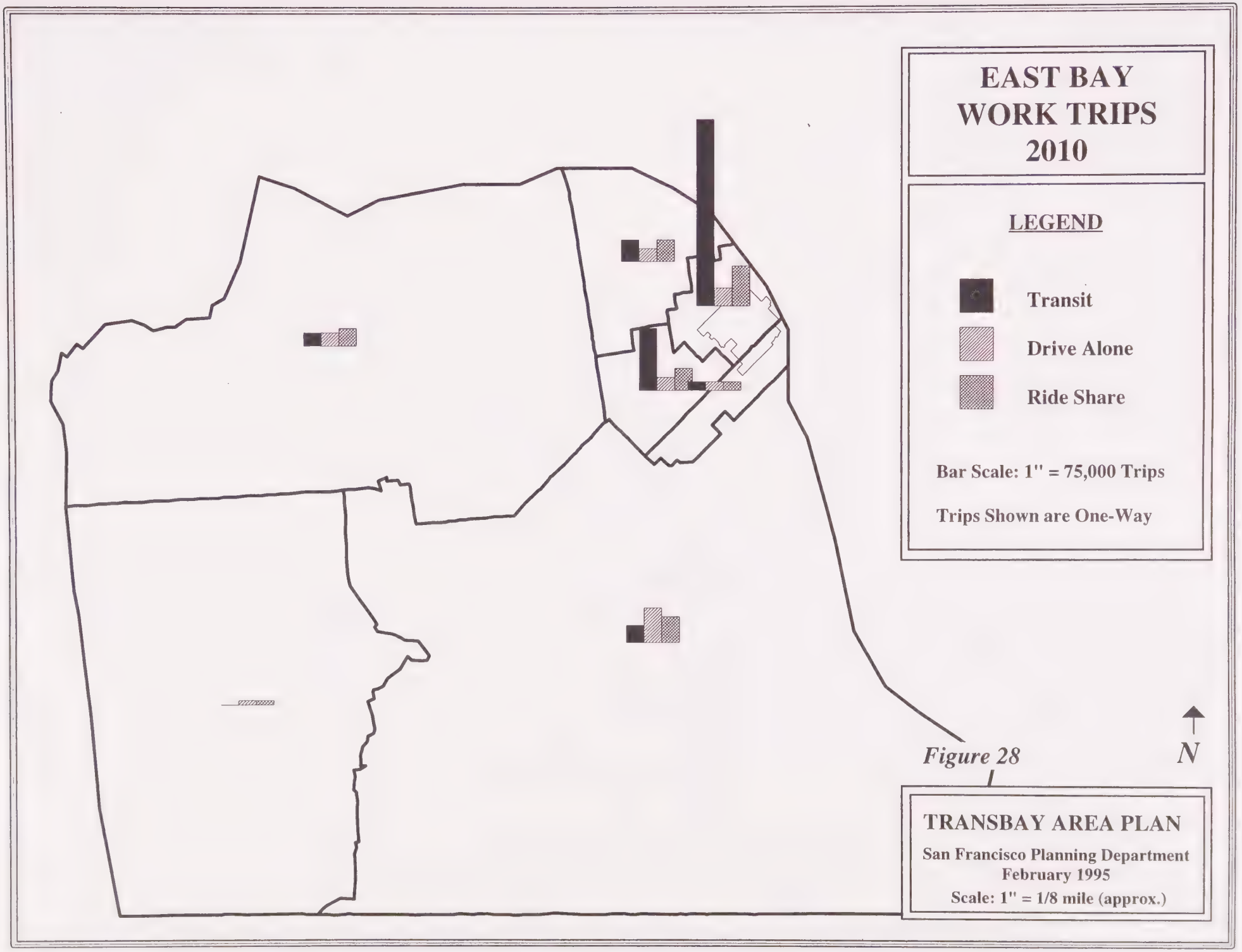


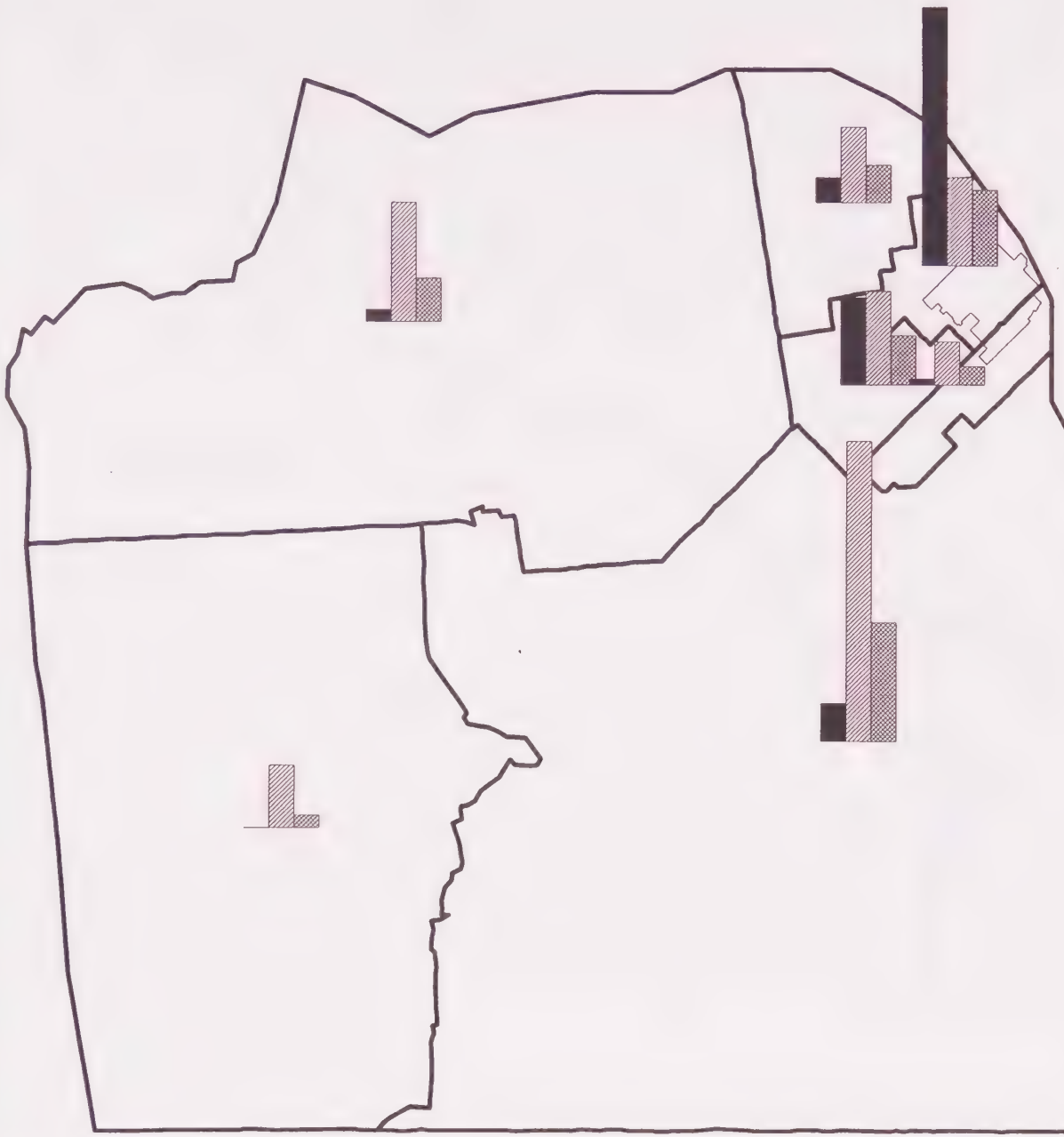
Figure 26

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995
Scale: 1" = 1/8 mile (approx.)


SAN FRANCISCO
WORK TRIPS
2010
LEGEND
Transit
Drive Alone
Ride Share
Bar Scale: 1" = 75,000 Trips
Trips Shown are One-Way
N
Figure 27
TRANSBAY AREA PLAN
San Francisco Planning Department
February 1995
Scale: 1" = 1/8 mile (approx.)


EAST BAY
WORK TRIPS
2010
LEGEND
Transit
Drive Alone
Ride Share
Bar Scale: 1" = 75,000 Trips
Trips Shown are One-Way
N
Figure 28
TRANSBAY AREA PLAN
San Francisco Planning Department
February 1995
Scale: 1" = 1/8 mile (approx.)



SOUTH BAY WORK TRIPS 2010

LEGEND

- Transit
- Drive Alone
- Ride Share

Bar Scale: 1" = 25,000 Trips

Trips Shown are One-Way

N

Figure 29

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995

Scale: 1" = 1/8 mile (approx.)

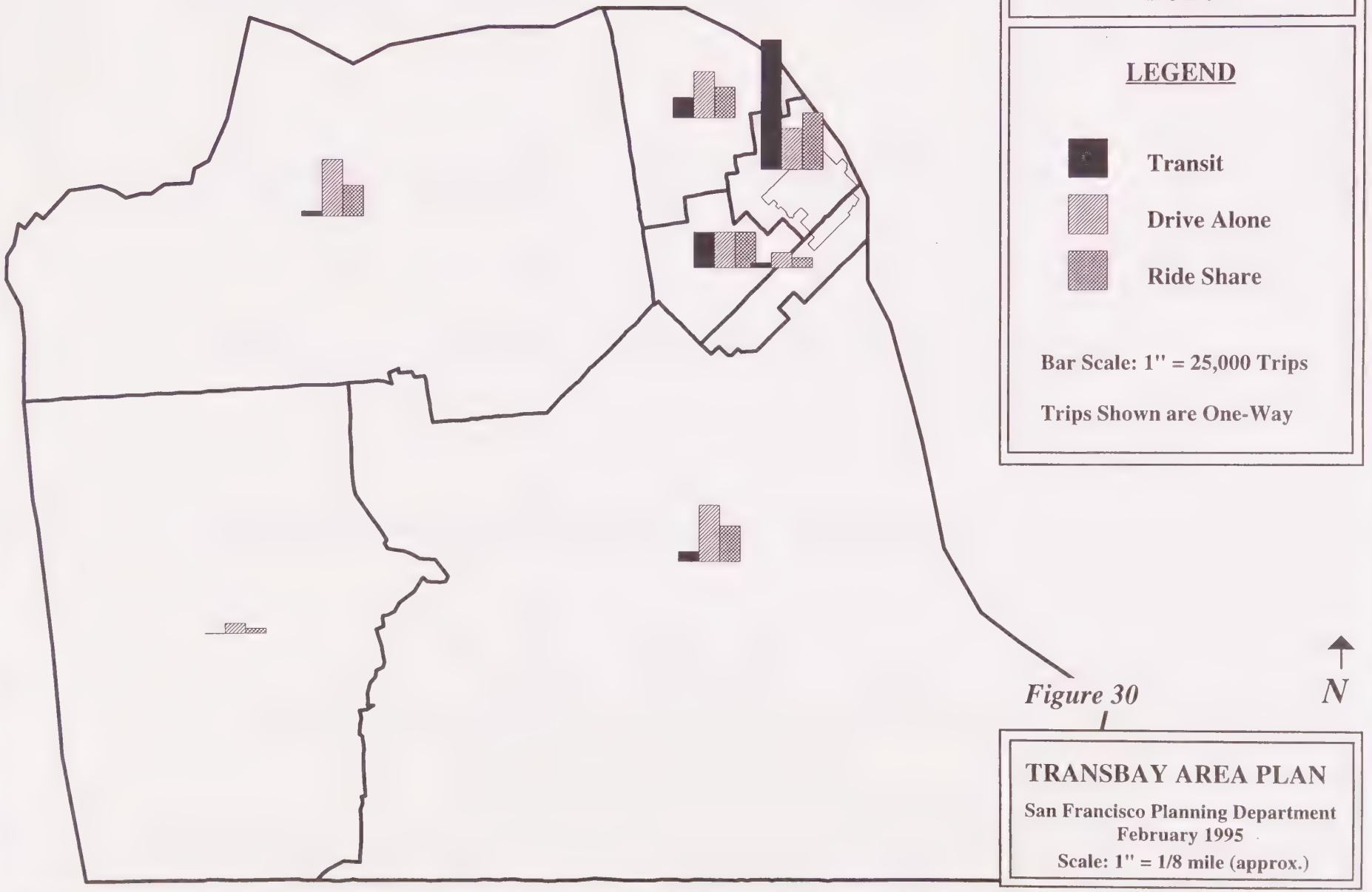

NORTH BAY
WORK TRIPS
2010
LEGEND
Transit
Drive Alone
Ride Share
Bar Scale: 1" = 25,000 Trips
Trips Shown are One-Way
N
TRANSBAY AREA PLAN
San Francisco Planning Department
February 1995
Scale: 1" = 1/8 mile (approx.)

Figure 30

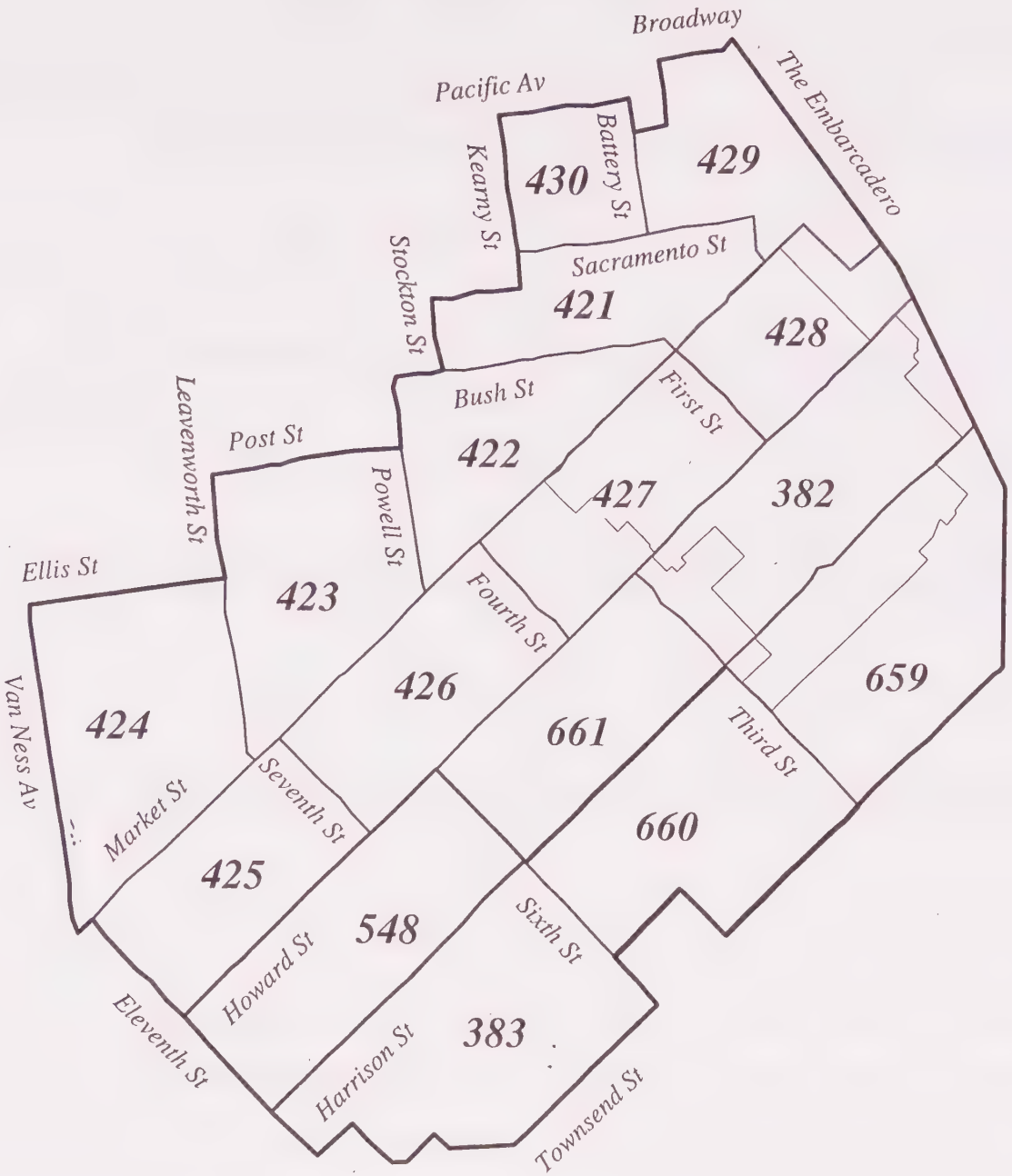
TABLE 18 - PROJECTED 1990 to 2010 CHANGE IN ONE-WAY DAILY PERSON WORK TRIPS TO SAN FRANCISCO, by ORIGIN and MODE

TRIP ORIGIN	DESTINATION SUB-AREA	TRANSIT	AUTO	RIDE SHARE	ALL MODES
SAN FRANCISCO	C -3 WEST	30.3%	-11.8%	20.3%	15.6%
	C-3 EAST	6.7%	-44.0%	-16.7%	-4.2%
	SUP. DIST. 1 NORTH	11.7%	-0.7%	16.1%	6.9%
	SUP. DIST. 1 SOUTH	81.3%	18.3%	54.2%	41.5%
	SUP. DIST. 2	33.5%	6.2%	28.5%	16.6%
	SUP. DIST. 3	79.9%	33.3%	63.4%	49.7%
	SUP. DIST. 4	27.2%	18.3%	39.6%	23.1%
SUB-TOTAL		21.9%	3.8%	21.7%	14.9%
EAST BAY	C -3 WEST	84.7%	-41.2%	61.0%	37.0%
	C-3 EAST	27.4%	-64.1%	9.7%	7.0%
	SUP. DIST. 1 NORTH	96.8%	-11.1%	114.0%	54.6%
	SUP. DIST. 1 SOUTH	254.6%	-5.3%	130.3%	75.6%
	SUP. DIST. 2	173.2%	60.7%	311.6%	142.8%
	SUP. DIST. 3	322.3%	193.1%	582.1%	301.2%
	SUP. DIST. 4	107.1%	190.0%	402.0%	225.5%
SUB-TOTAL		53.2%	-8.2%	93.7%	42.5%
SOUTH BAY	C -3 WEST	63.5%	-8.7%	33.6%	19.8%
	C-3 EAST	18.6%	-42.1%	-5.0%	-6.3%
	SUP. DIST. 1 NORTH	20.3%	15.8%	42.5%	22.7%
	SUP. DIST. 1 SOUTH	44.3%	26.8%	71.5%	38.5%
	SUP. DIST. 2	13.9%	36.4%	53.4%	38.8%
	SUP. DIST. 3	59.8%	68.8%	103.2%	75.7%
	SUP. DIST. 4	-7.9%	73.6%	46.0%	64.1%
SUB-TOTAL		29.3%	19.2%	43.6%	26.9%
NORTH BAY	C -3 WEST	45.5%	-1.5%	105.3%	35.5%
	C-3 EAST	32.8%	-31.9%	55.3%	16.9%
	SUP. DIST. 1 NORTH	4.9%	0.5%	72.7%	17.5%
	SUP. DIST. 1 SOUTH	81.1%	17.8%	108.9%	48.9%
	SUP. DIST. 2	-37.7%	19.6%	105.3%	29.2%
	SUP. DIST. 3	53.4%	182.2%	337.2%	193.3%
	SUP. DIST. 4	77.8%	199.2%	196.2%	196.4%
SUB-TOTAL		28.2%	15.5%	100.3%	37.2%
GRAND TOTAL		**30.5%**	**6.1%**	**50.7%**	**24.0%**

NOTE: % of All Origins refers to column totals (reading down), while % of All Modes refers to row totals (reading across)

Source: MTC Daily One-Way Person Trip Projections. Prepared by San Francisco Planning Department, February, 1995.

C. TRAVEL PROJECTIONS:
TAZ Level Analysis for Study Area Vicinity



TRAVEL ANALYSIS ZONES IN VICINTIY OF STUDY AREA

LEGEND

- Transbay Study Area
- TAZ Boundary
- 342 TAZ Number

N

Figure 31

TRANSBAY AREA PLAN

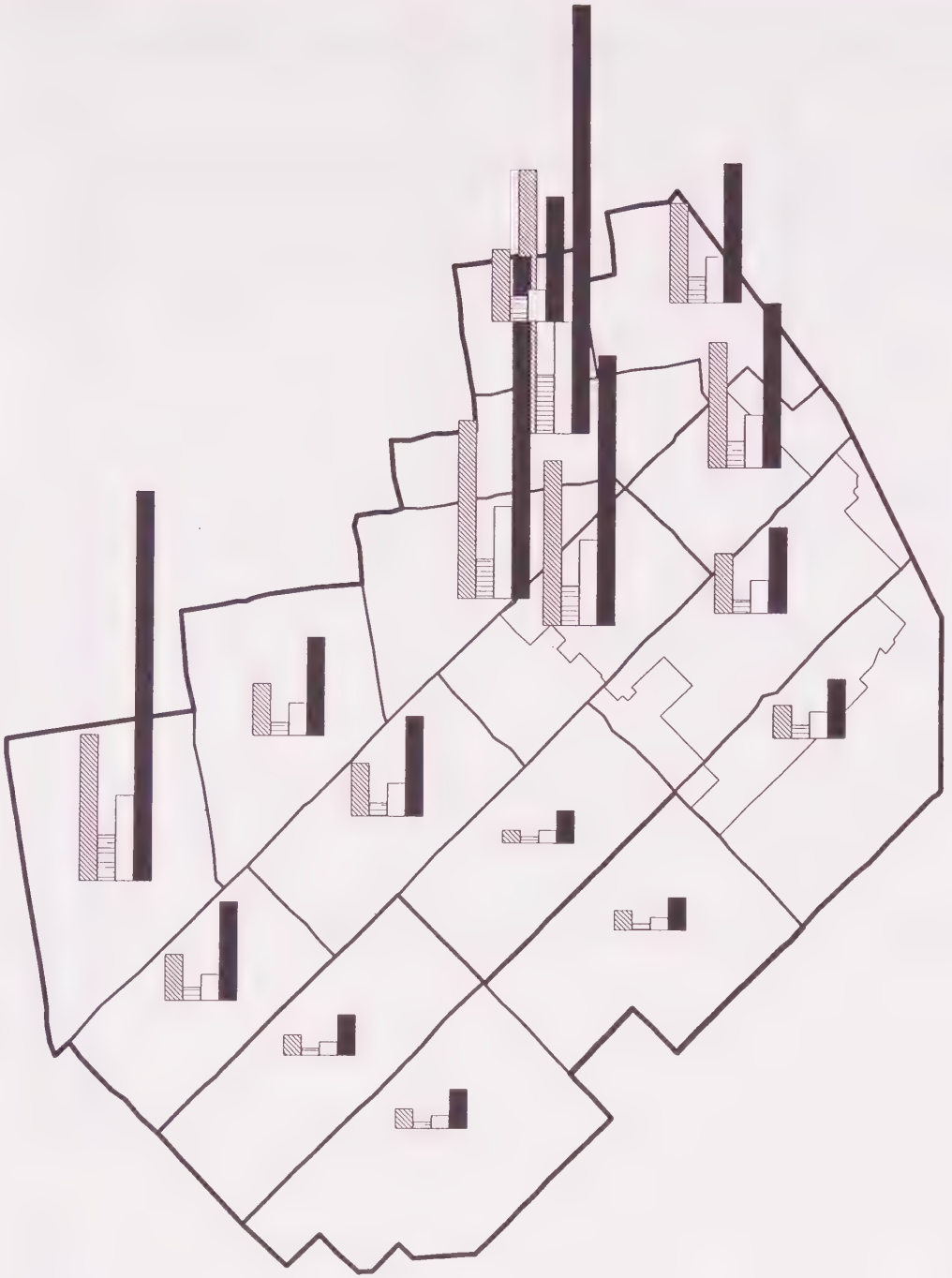
San Francisco Planning Department
February 1995
Scale: 1" = 1/8 mile (approx.)

TABLE 19 - PROJECTED 1990 ONE-WAY DAILY PERSON WORK TRIPS TO STUDY AREA VICINITY, by ORIGIN and MODE

TRIP ORIGIN	DESTINATION TAZ	TRANSIT	% OF ALL ORIGINS	% OF ALL MODES	AUTO	% OF ALL ORIGINS	% OF ALL MODES	RIDE SHARE	% OF ALL ORIGINS	% OF ALL MODES	ALL MODES	% OF ALL ORIGINS
	382	3,269	1.3%	43.2%	2,997	2.6%	39.60%	1,302	2.1%	17.2%	7,568	1.8%
	383	953	0.4%	25.8%	2,022	1.7%	54.81%	714	1.1%	19.4%	3,689	0.9%
	421	30,127	12.4%	81.7%	3,903	3.4%	10.58%	2,865	4.5%	7.8%	36,895	8.7%
	422	23,418	9.6%	78.9%	3,666	3.2%	12.36%	2,584	4.1%	8.7%	29,668	7.0%
	423	4,699	1.9%	53.4%	2,852	2.5%	32.40%	1,252	2.0%	14.2%	8,803	2.1%
	424	20,828	8.6%	62.4%	8,625	7.4%	25.82%	3,949	6.3%	11.8%	33,402	7.9%
	425	4,237	1.7%	48.7%	3,190	2.8%	36.65%	1,278	2.0%	14.7%	8,705	2.1%
SAN FRANCISCO	426	4,162	1.7%	49.4%	2,972	2.6%	35.29%	1,287	2.0%	15.3%	8,421	2.0%
	427	15,915	6.5%	67.8%	4,854	4.2%	20.68%	2,701	4.3%	11.5%	23,470	5.6%
	428	9,672	4.0%	67.2%	3,037	2.6%	21.09%	1,689	2.7%	11.7%	14,398	3.4%
	429	7,964	3.3%	66.8%	2,450	2.1%	20.56%	1,503	2.4%	12.6%	11,917	2.8%
	430	7,960	3.3%	73.2%	1,753	1.5%	16.13%	1,155	1.8%	10.6%	10,868	2.6%
	548	1,036	0.4%	30.1%	1,760	1.5%	51.07%	650	1.0%	18.9%	3,446	0.8%
	659	1,176	0.5%	23.5%	2,800	2.4%	56.07%	1,018	1.6%	20.4%	4,994	1.2%
	660	836	0.3%	29.1%	1,507	1.3%	52.49%	528	0.8%	18.4%	2,871	0.7%
	661	877	0.4%	33.7%	1,278	1.1%	49.04%	451	0.7%	17.3%	2,606	0.6%
SUB-TOTAL		137,129	56.4%	64.8%	49,666	42.8%	23.46%	24,926	39.6%	11.8%	211,721	50.2%
	382	2,108	0.9%	39.2%	2,057	1.8%	38.22%	1,217	1.9%	22.6%	5,382	1.3%
	383	240	0.1%	14.6%	908	0.8%	55.13%	499	0.8%	30.3%	1,647	0.4%
	421	16,922	7.0%	73.6%	3,076	2.7%	13.38%	2,986	4.7%	13.0%	22,984	5.4%
	422	10,995	4.5%	71.6%	2,252	1.9%	14.67%	2,108	3.3%	13.7%	15,355	3.6%
	423	2,223	0.9%	48.5%	1,480	1.3%	32.27%	884	1.4%	19.3%	4,587	1.1%
	424	6,717	2.8%	52.8%	3,761	3.2%	29.55%	2,248	3.6%	17.7%	12,726	3.0%
	425	1,470	0.6%	39.7%	1,439	1.2%	38.90%	790	1.3%	21.4%	3,699	0.9%
EAST BAY	426	1,869	0.8%	42.4%	1,588	1.4%	36.01%	953	1.5%	21.6%	4,410	1.0%
	427	8,678	3.6%	61.5%	3,105	2.7%	22.02%	2,321	3.7%	16.5%	14,104	3.3%
	428	6,587	2.7%	60.9%	2,444	2.1%	22.60%	1,783	2.8%	16.5%	10,814	2.6%
	429	5,384	2.2%	61.8%	1,805	1.6%	20.72%	1,524	2.4%	17.5%	8,713	2.1%
	430	3,716	1.5%	61.2%	1,215	1.0%	20.03%	1,136	1.8%	18.7%	6,067	1.4%
	548	321	0.1%	21.3%	755	0.7%	50.10%	431	0.7%	28.6%	1,507	0.4%
	659	511	0.2%	16.6%	1,701	1.5%	55.21%	869	1.4%	28.2%	3,081	0.7%
	660	266	0.1%	18.2%	773	0.7%	52.76%	426	0.7%	29.1%	1,465	0.3%
	661	320	0.1%	23.6%	671	0.6%	49.56%	363	0.6%	26.8%	1,354	0.3%
SUB-TOTAL		68,327	28.1%	58.0%	29,030	25.0%	24.62%	20,538	32.6%	17.4%	117,895	27.9%
	382	588	0.2%	21.1%	1,600	1.4%	57.29%	605	1.0%	21.7%	2,793	0.7%
	383	174	0.1%	12.3%	934	0.8%	66.15%	304	0.5%	21.5%	1,412	0.3%
	421	5,822	2.4%	59.2%	2,531	2.2%	25.72%	1,488	2.4%	15.1%	9,841	2.3%
	422	4,587	1.9%	57.7%	2,141	1.8%	26.92%	1,225	1.9%	15.4%	7,953	1.9%
	423	822	0.3%	31.1%	1,311	1.1%	49.60%	510	0.8%	19.3%	2,643	0.6%
	424	2,320	1.0%	30.5%	3,808	3.3%	50.02%	1,485	2.4%	19.5%	7,613	1.8%
	425	661	0.3%	26.5%	1,369	1.2%	54.78%	469	0.7%	18.8%	2,499	0.6%
SOUTH BAY	426	781	0.3%	29.3%	1,370	1.2%	51.45%	512	0.8%	19.2%	2,663	0.6%
	427	3,115	1.3%	43.7%	2,743	2.4%	38.48%	1,271	2.0%	17.8%	7,129	1.7%
	428	2,035	0.8%	43.2%	1,825	1.6%	38.76%	849	1.3%	18.0%	4,709	1.1%
	429	1,584	0.7%	42.5%	1,400	1.2%	37.60%	739	1.2%	19.8%	3,723	0.9%
	430	1,318	0.5%	46.9%	955	0.8%	33.97%	538	0.9%	19.1%	2,811	0.7%
	548	146	0.1%	13.0%	732	0.6%	65.30%	243	0.4%	21.7%	1,121	0.3%
	659	190	0.1%	8.9%	1,476	1.3%	69.23%	466	0.7%	21.9%	2,132	0.5%
	660	209	0.1%	17.7%	727	0.6%	61.71%	242	0.4%	20.5%	1,178	0.3%
	661	135	0.1%	15.1%	555	0.5%	62.15%	203	0.3%	22.7%	893	0.2%
SUB-TOTAL		24,487	10.1%	40.1%	25,477	22.0%	41.69%	11,149	17.7%	18.2%	61,113	14.5%
	382	386	0.2%	27.5%	698	0.6%	49.72%	320	0.5%	22.8%	1,404	0.3%
	383	36	0.0%	6.8%	341	0.3%	64.22%	154	0.2%	29.0%	531	0.1%
	421	3,138	1.3%	59.6%	1,258	1.1%	23.88%	871	1.4%	16.5%	5,267	1.2%
	422	1,698	0.7%	48.1%	1,085	0.9%	30.75%	745	1.2%	21.1%	3,528	0.8%
	423	415	0.2%	29.7%	675	0.6%	48.25%	309	0.5%	22.1%	1,399	0.3%
	424	1,487	0.6%	37.7%	1,698	1.5%	43.07%	757	1.2%	19.2%	3,942	0.9%
	425	312	0.1%	26.5%	612	0.5%	51.95%	254	0.4%	21.6%	1,178	0.3%
NORTH BAY	426	393	0.2%	30.9%	598	0.5%	46.98%	282	0.4%	22.2%	1,273	0.3%
	427	1,641	0.7%	46.6%	1,194	1.0%	33.89%	688	1.1%	19.5%	3,523	0.8%
	428	1,132	0.5%	45.2%	877	0.8%	35.01%	496	0.8%	19.8%	2,505	0.6%
	429	1,079	0.4%	47.2%	738	0.6%	32.28%	469	0.7%	20.5%	2,286	0.5%
	430	1,166	0.5%	54.8%	578	0.5%	27.17%	383	0.6%	18.0%	2,127	0.5%
	548	91	0.0%	17.3%	302	0.3%	57.31%	134	0.2%	25.4%	527	0.1%
	659	115	0.0%	11.5%	616	0.5%	61.85%	265	0.4%	26.6%	996	0.2%
	660	51	0.0%	11.6%	270	0.2%	61.22%	120	0.2%	27.2%	441	0.1%
	661	79	0.0%	18.5%	240	0.2%	56.21%	108	0.2%	25.3%	427	0.1%
SUB-TOTAL		13,219	5.4%	42.2%	11,780	10.2%	37.57%	6,355	10.1%	20.3%	31,354	7.4%
GRAND TOTAL		243,162	100.0%	57.6%	115,953	100.0%	27.47%	62,968	100.0%	14.9%	422,083	100.0%

NOTE: % of All Origins refers to column totals (reading down), while % of All Modes refers to row totals (reading across).

Source: MTC Daily One-Way Person Trip Projections. Prepared by San Francisco Planning Department, February, 1995.



TRIPS TO AREA TAZs BY ORIGIN 1990

LEGEND

- San Francisco
- South Bay
- North Bay
- East Bay

Bar Scale: 1" = 25,000 Trips

Trips Shown are One-Way Work Trips

Figure 32

N

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995

SAN FRANCISCO TRIPS TO AREA TAZs BY ORIGIN 1990

LEGEND

- Transit
- Drive Alone
- Ride Share

Bar Scale: 1" = 25,000 Trips

Trips Shown are One-Way Work Trips

Figure 33

N

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995

EAST BAY TRIPS TO AREA TAZs BY ORIGIN 1990

LEGEND

- Transit
- Drive Alone
- Ride Share

Bar Scale: 1" = 25,000 Trips

Trips Shown are One-Way Work Trips

N

Figure 34

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995

SOUTH BAY TRIPS TO AREA TAZs BY ORIGIN 1990

LEGEND

- Transit
- Drive Alone
- Ride Share

Bar Scale: 1" = 25,000 Trips

Trips Shown are One-Way Work Trips

N

Figure 35

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995

NORTH BAY TRIPS TO AREA TAZs BY ORIGIN 1990

LEGEND

- Transit
- Drive Alone
- Ride Share

Bar Scale: 1" = 15,000 Trips

Trips Shown are One-Way Work Trips

Figure 36

N

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995

TABLE 20 - PROJECTED 2010 ONE-WAY DAILY PERSON WORK TRIPS TO STUDY AREA VICINITY, by ORIGIN and MODE

TRIP ORIGIN	DESTINATION TAZ	TRANSIT	% OF ALL ORIGINS	% OF ALL MODES	AUTO	% OF ALL ORIGINS	% OF ALL MODES	RIDE SHARE	% OF ALL ORIGINS	% OF ALL MODES	ALL MODES	% OF ALL ORIGINS
	382	5,780	2.0%	48.9%	3,996	5.0%	33.8%	2,052	2.8%	17.3%	11,828	2.7%
	383	1,512	0.5%	32.5%	2,114	2.6%	45.5%	1,025	1.4%	22.0%	4,651	1.0%
	421	32,319	11.1%	89.6%	1,627	2.0%	4.5%	2,122	2.9%	5.9%	36,068	8.1%
	422	25,905	8.9%	87.9%	1,585	2.0%	5.4%	1,971	2.7%	6.7%	29,461	6.6%
	423	9,835	3.4%	72.3%	2,127	2.6%	15.6%	1,650	2.3%	12.1%	13,612	3.1%
	424	20,517	7.1%	66.6%	6,473	8.0%	21.0%	3,813	5.3%	12.4%	30,803	6.9%
	425	5,702	2.0%	58.0%	2,639	3.3%	26.8%	1,491	2.1%	15.2%	9,832	2.2%
SAN FRANCISCO	426	5,314	1.8%	56.0%	2,670	3.3%	28.1%	1,501	2.1%	15.8%	9,485	2.1%
	427	17,514	6.0%	83.1%	1,639	2.0%	7.8%	1,911	2.6%	9.1%	21,064	4.8%
	428	9,651	3.3%	74.7%	1,804	2.2%	14.0%	1,467	2.0%	11.4%	12,922	2.9%
	429	7,211	2.5%	74.0%	1,347	1.7%	13.8%	1,192	1.7%	12.2%	9,750	2.2%
	430	6,437	2.2%	81.4%	697	0.9%	8.8%	772	1.1%	9.8%	7,906	1.8%
	548	2,815	1.0%	42.2%	2,550	3.2%	38.2%	1,303	1.8%	19.5%	6,668	1.5%
	659	2,588	0.9%	32.3%	3,706	4.6%	46.2%	1,722	2.4%	21.5%	8,016	1.8%
	660	1,254	0.4%	34.5%	1,642	2.0%	45.2%	735	1.0%	20.2%	3,631	0.8%
	661	2,460	0.8%	47.8%	1,781	2.2%	34.6%	902	1.3%	17.5%	5,143	1.2%
SUB-TOTAL		156,814	54.0%	71.0%	38,397	47.6%	17.4%	25,629	35.5%	11.6%	220,840	49.8%
	382	4,455	1.5%	51.9%	1,853	2.3%	21.6%	2,270	3.1%	26.5%	8,578	1.9%
	383	548	0.2%	27.5%	657	0.8%	33.0%	785	1.1%	39.4%	1,990	0.4%
	421	20,269	7.0%	84.9%	785	1.0%	3.3%	2,822	3.9%	11.8%	23,876	5.4%
	422	13,571	4.7%	83.7%	563	0.7%	3.5%	2,084	2.9%	12.8%	16,218	3.7%
	423	5,120	1.8%	72.0%	626	0.8%	8.8%	1,370	1.9%	19.3%	7,116	1.6%
	424	8,166	2.8%	66.0%	1,689	2.1%	13.6%	2,523	3.5%	20.4%	12,378	2.8%
	425	2,310	0.8%	57.3%	702	0.9%	17.4%	1,017	1.4%	25.2%	4,029	0.9%
EAST BAY	426	2,783	1.0%	57.4%	846	1.0%	17.4%	1,220	1.7%	25.2%	4,849	1.1%
	427	10,416	3.6%	78.9%	653	0.8%	4.9%	2,133	3.0%	16.2%	13,202	3.0%
	428	7,385	2.5%	73.4%	871	1.1%	8.7%	1,802	2.5%	17.9%	10,058	2.3%
	429	5,358	1.8%	72.0%	605	0.8%	8.1%	1,474	2.0%	19.8%	7,437	1.7%
	430	3,055	1.1%	73.1%	259	0.3%	6.2%	867	1.2%	20.7%	4,181	0.9%
	548	1,328	0.5%	43.6%	768	1.0%	25.2%	951	1.3%	31.2%	3,047	0.7%
	659	1,728	0.6%	34.3%	1,549	1.9%	30.8%	1,759	2.4%	34.9%	5,036	1.1%
	660	526	0.2%	30.8%	587	0.7%	34.4%	595	0.8%	34.8%	1,708	0.4%
	661	1,254	0.4%	46.6%	643	0.8%	23.9%	794	1.1%	29.5%	2,691	0.6%
SUB-TOTAL		88,272	30.4%	69.8%	13,656	16.9%	10.8%	24,466	33.9%	19.4%	126,394	28.5%
	382	1,025	0.4%	26.1%	2,012	2.5%	51.2%	889	1.2%	22.6%	3,926	0.9%
	383	195	0.1%	12.3%	969	1.2%	61.1%	421	0.6%	26.6%	1,585	0.4%
	421	6,271	2.2%	73.8%	1,074	1.3%	12.6%	1,152	1.6%	13.6%	8,497	1.9%
	422	4,851	1.7%	69.0%	1,067	1.3%	15.2%	1,109	1.5%	15.8%	7,027	1.6%
	423	1,703	0.6%	48.2%	1,081	1.3%	30.6%	746	1.0%	21.1%	3,530	0.8%
	424	2,825	1.0%	41.8%	2,582	3.2%	38.2%	1,354	1.9%	20.0%	6,761	1.5%
	425	846	0.3%	34.4%	1,072	1.3%	43.6%	540	0.7%	22.0%	2,458	0.6%
SOUTH BAY	426	869	0.3%	31.6%	1,247	1.5%	45.3%	635	0.9%	23.1%	2,751	0.6%
	427	3,487	1.2%	62.8%	1,058	1.3%	19.0%	1,009	1.4%	18.2%	5,554	1.3%
	428	1,954	0.7%	50.8%	1,103	1.4%	28.7%	792	1.1%	20.6%	3,849	0.9%
	429	1,485	0.5%	51.5%	774	1.0%	26.9%	622	0.9%	21.6%	2,881	0.6%
	430	983	0.3%	56.0%	376	0.5%	21.4%	395	0.5%	22.5%	1,754	0.4%
	548	439	0.2%	22.0%	1,066	1.3%	53.3%	495	0.7%	24.8%	2,000	0.5%
	659	400	0.1%	12.9%	1,928	2.4%	62.1%	775	1.1%	25.0%	3,103	0.7%
	660	140	0.0%	11.0%	804	1.0%	63.1%	330	0.5%	25.9%	1,274	0.3%
	661	376	0.1%	23.0%	863	1.1%	52.8%	395	0.5%	24.2%	1,634	0.4%
SUB-TOTAL		27,849	9.6%	47.5%	19,076	23.7%	32.6%	11,659	16.2%	19.9%	58,584	13.2%
	382	712	0.2%	29.6%	975	1.2%	40.5%	719	1.0%	29.9%	2,406	0.5%
	383	60	0.0%	9.2%	331	0.4%	50.7%	262	0.4%	40.1%	653	0.1%
	421	4,791	1.6%	68.9%	785	1.0%	11.3%	1,377	1.9%	19.8%	6,953	1.6%
	422	2,108	0.7%	54.8%	645	0.8%	16.8%	1,091	1.5%	28.4%	3,844	0.9%
	423	904	0.3%	41.2%	591	0.7%	27.0%	697	1.0%	31.8%	2,192	0.5%
	424	1,655	0.6%	38.7%	1,419	1.8%	33.2%	1,206	1.7%	28.2%	4,280	1.0%
	425	394	0.1%	28.0%	536	0.7%	38.1%	477	0.7%	33.9%	1,407	0.3%
NORTH BAY	426	521	0.2%	33.3%	563	0.7%	36.0%	480	0.7%	30.7%	1,564	0.4%
	427	2,253	0.8%	61.0%	537	0.7%	14.5%	901	1.2%	24.4%	3,691	0.8%
	428	1,274	0.4%	49.6%	581	0.7%	22.6%	711	1.0%	27.7%	2,566	0.6%
	429	1,166	0.4%	49.7%	509	0.6%	21.7%	672	0.9%	28.6%	2,347	0.5%
	430	1,130	0.4%	61.1%	277	0.3%	15.0%	441	0.6%	23.9%	1,848	0.4%
	548	256	0.1%	24.5%	436	0.5%	41.6%	355	0.5%	33.9%	1,047	0.2%
	659	202	0.1%	13.8%	735	0.9%	50.1%	529	0.7%	36.1%	1,466	0.3%
	660	75	0.0%	14.7%	247	0.3%	48.5%	187	0.3%	36.7%	509	0.1%
	661	215	0.1%	25.0%	360	0.4%	41.9%	284	0.4%	33.1%	859	0.2%
SUB-TOTAL		17,716	6.1%	47.1%	9,527	11.8%	25.3%	10,389	14.4%	27.6%	37,632	8.5%
GRAND TOTAL		290,651	100.0%	65.5%	80,656	100.0%	18.2%	72,143	100.0%	16.3%	443,450	100.0%

NOTE: % of All Origins refers to column totals (reading down), while % of All Modes refers to row totals (reading across).

Source: MTC Daily One-Way Person Trip Projections. Prepared by San Francisco Planning Department, February, 1995.

TRIPS TO AREA TAZs BY ORIGIN 2010

LEGEND

- San Francisco
- South Bay
- North Bay
- East Bay

Bar Scale: 1" = 25,000 Trips

Trips Shown are One-Way Work Trips

N

Figure 37

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995

SAN FRANCISCO TRIPS TO AREA TAZs BY ORIGIN 2010

LEGEND

- Transit
- Drive Alone
- Ride Share

Bar Scale: 1" = 25,000 Trips

Trips Shown are One-Way Work Trips

Figure 38

N

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995

EAST BAY TRIPS TO AREA TAZs BY ORIGIN 2010

LEGEND

- Transit
- Drive Alone
- Ride Share

Bar Scale: 1" = 25,000 Trips

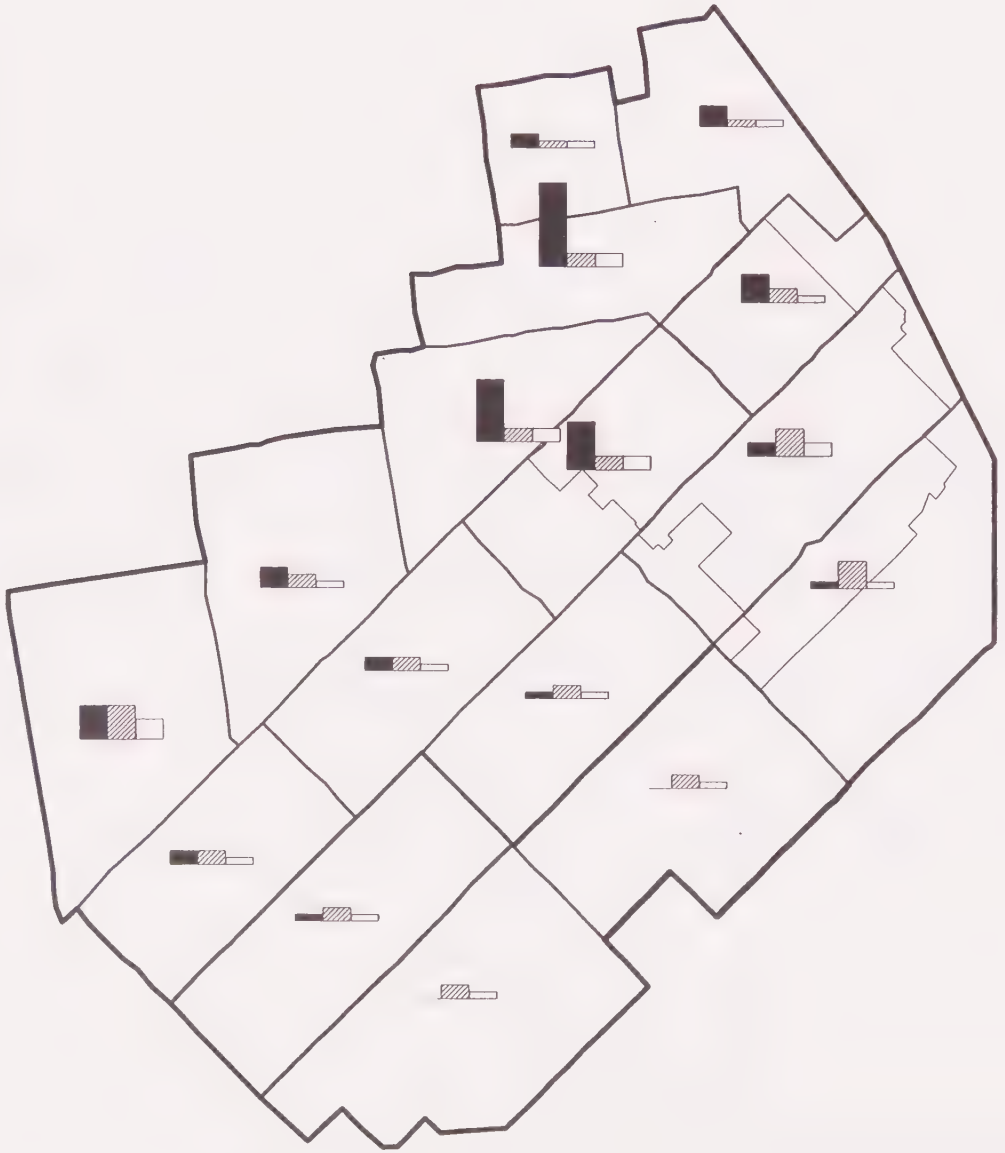
Trips Shown are One-Way Work Trips

Figure 39

N

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995



SOUTH BAY TRIPS TO AREA TAZs BY ORIGIN 2010

LEGEND

- Transit
- Drive Alone
- Ride Share

Bar Scale: 1" = 25,000 Trips

Trips Shown are One-Way Work Trips

Figure 40

N

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995

NORTH BAY TRIPS TO AREA TAZs BY ORIGIN 2010

LEGEND

- Transit
- Drive Alone
- Ride Share

Bar Scale: 1" = 25,000 Trips

Trips Shown are One-Way Work Trips

N

Figure 41

TRANSBAY AREA PLAN

San Francisco Planning Department
February 1995

TABLE 21 - PROJECTED 1990 to 2010 CHANGE IN ONE-WAY DAILY PERSON WORK TRIPS TO STUDY AREA VICINITY, by ORIGIN and MODE

TRIP ORIGIN	DESTINATION TAZ	TRANSIT	AUTO	RIDE SHARE	ALL MODES
SAN FRANCISCO	382	43.4%	33.3%	57.6%	56.3%
	383	37.0%	4.5%	43.6%	26.1%
	421	6.8%	-58.3%	-25.9%	-2.2%
	422	9.6%	-56.8%	-23.7%	-0.7%
	423	52.2%	-25.4%	31.8%	54.6%
	424	-1.5%	-25.0%	-3.4%	-7.8%
	425	25.7%	-17.3%	16.7%	12.9%
	426	21.7%	-10.2%	16.6%	12.6%
	427	9.1%	-66.2%	-29.2%	-10.3%
	428	-0.2%	-40.6%	-13.1%	-10.3%
	429	-10.4%	-45.0%	-20.7%	-18.2%
	430	-23.7%	-60.2%	-33.2%	-27.3%
	548	63.2%	44.9%	100.5%	93.5%
	659	54.6%	32.4%	69.2%	60.5%
	660	33.3%	9.0%	39.2%	26.5%
	661	64.3%	39.4%	100.0%	97.4%
SUB-TOTAL		12.6%	-22.7%	2.8%	4.3%
EAST BAY	382	52.7%	-9.9%	86.5%	59.4%
	383	56.2%	-27.6%	57.3%	20.8%
	421	16.5%	-74.5%	-5.5%	3.9%
	422	19.0%	-75.0%	-1.1%	5.6%
	423	56.6%	-57.7%	55.0%	55.1%
	424	17.7%	-55.1%	12.2%	-2.7%
	425	36.4%	-51.2%	28.7%	8.9%
	426	32.8%	-46.7%	28.0%	10.0%
	427	16.7%	-79.0%	-8.1%	-6.4%
	428	10.8%	-64.4%	1.1%	-7.0%
	429	-0.5%	-66.5%	-3.3%	-14.6%
	430	-21.6%	-78.7%	-23.7%	-31.1%
	548	75.8%	1.7%	120.6%	102.2%
	659	70.4%	-8.9%	102.4%	63.5%
	660	49.4%	-24.1%	39.7%	16.6%
	661	74.5%	-4.2%	118.7%	98.7%
SUB-TOTAL		22.6%	-53.0%	19.1%	7.2%
SOUTH BAY	382	42.6%	25.8%	46.9%	40.6%
	383	10.8%	3.7%	38.5%	12.3%
	421	7.2%	-57.6%	-22.6%	-13.7%
	422	5.4%	-50.2%	-9.5%	-11.6%
	423	51.7%	-17.5%	46.3%	33.6%
	424	17.9%	-32.2%	-8.8%	-11.2%
	425	21.9%	-21.7%	15.1%	-1.6%
	426	10.1%	-9.0%	24.0%	3.3%
	427	10.7%	-61.4%	-20.6%	-22.1%
	428	-4.1%	-39.6%	-6.7%	-18.3%
	429	-6.7%	-44.7%	-15.8%	-22.6%
	430	-34.1%	-60.6%	-26.6%	-37.6%
	548	66.7%	45.6%	103.7%	78.4%
	659	52.5%	30.6%	66.3%	45.5%
	660	-49.3%	10.6%	36.4%	8.1%
	661	64.1%	55.5%	94.6%	83.0%
SUB-TOTAL		12.1%	-25.1%	4.6%	-4.1%
NORTH BAY	382	45.8%	39.7%	124.7%	71.4%
	383	40.0%	-2.9%	70.1%	23.0%
	421	34.5%	-37.6%	58.1%	32.0%
	422	19.4%	-40.6%	46.4%	9.0%
	423	54.1%	-12.4%	125.6%	56.7%
	424	10.2%	-16.4%	59.3%	8.6%
	425	20.8%	-12.4%	87.8%	19.4%
	426	24.6%	-5.9%	70.2%	22.9%
	427	27.2%	-55.0%	31.0%	4.8%
	428	11.1%	-33.8%	43.3%	2.4%
	429	7.5%	-31.0%	43.3%	2.7%
	430	-3.2%	-52.1%	15.1%	-13.1%
	548	64.5%	44.4%	164.9%	98.7%
	659	43.1%	19.3%	99.6%	47.2%
	660	32.0%	-8.5%	55.8%	15.4%
	661	63.3%	50.0%	163.0%	101.2%
SUB-TOTAL		25.4%	-19.1%	63.5%	20.0%
GRAND TOTAL		16.3%	-30.4%	14.6%	5.1%

NOTE: % of All Origins refers to column totals (reading down), while % of All Modes refers to row totals (reading across).

Source: MTC Daily One-Way Person Trip Projections. Prepared by San Francisco Planning Department, February, 1995.

IV. APPENDIX

A. RESOLUTION IN SUPPORT OF UPGRADING THE TRANSBAY TRANSIT TERMINAL

The following resolution was passed in 1993 by City Councils in Oakland, Berkeley, Richmond, El Cerrito, Hayward, Albany, Piedmont, Emeryville, and Alameda, and by SamTrans, SFBCSC, the Contra Costa Board of Supervisors, the Bay Area Air Quality Management District, and AC Transit (letters of support were also received from AC Transit and the Oakland Chamber of Commerce):

WHEREAS, a substantial increase in the use of public transportation is necessary to prevent deterioration of the environment and quality of life in the Bay Area; and

WHEREAS, transbay bus service is an important component of the transit services utilized by the residents of (CITY); and

WHEREAS, BART's transbay peak-period, peak-direction service is currently standing-room only;

WHEREAS, the Metropolitan Transportation Commission's recent Bay Crossing Study concluded that the most cost effective way to meet future transbay travel demand includes expanding existing transbay bus service;

WHEREAS, the Alameda County's evolving long-range transportation plan also calls for more transbay bus service to accommodate future travel demand;

WHEREAS, the Transbay Transit Terminal is the region's major public transit bus hub, linking all parts of the Bay Area via carriers such as AC Transit, Muni, SamTrans, Golden Gate Transit, BART, Amtrak, and Greyhound; and

WHEREAS, AC Transit supports the retention and ultimate upgrading of the Transbay Transit Terminal as its terminus for connecting services to San Francisco, the Peninsula, and North Bay communities; and

WHEREAS, improvements necessary to make the Transbay Terminal a more effective hub include both building code upgrades plus changes in the appearance of and mix of existing retail tenants; and

WHEREAS, Caltrans has programmed $32 million for seismic and other code upgrades to the Transbay Terminal; and

WHEREAS, the City and County of San Francisco asked Caltrans for a six-month delay (to September 1993) for the Transbay Terminal code upgrades while San Francisco examines possible

joint development opportunities with the Transbay Terminal, including possible relocation of the existing facility;

WHEREAS, planning for the future of the Transbay Terminal should be a cooperative effort involving all the jurisdictions with an interest in the Terminal, including cities in the East Bay;

NOW, THEREFORE, BE IT RESOLVED the City Council of (CITY) does hereby support:

(1) the seismic and other code upgrades programmed for the Transbay Terminal and urges Caltrans to proceed with these safety and access improvements as soon as possible;

(2) other efforts of Caltrans to upgrade the Terminal that will make uses of public transit, including future rail service, more attractive, while providing maximum flexibility for future retail uses at the current site;

BE IT FURTHER RESOLVED that Caltrans be requested to provide for effective participation by interested cities and transit agencies outside San Francisco in decision making about the future of the Transbay Terminal;

BE IT FURTHER RESOLVED that the City Council of (CITY) opposes any modification to the Transbay Terminal which will result in the deterioration of transit service quality for East Bay patrons, or an increase in operating time/costs for AC Transit.

CREDITS

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